Statistical Report on Internet Development in China

(July 2013)

China Internet Network Information Center

Preface

In 1997, state competent departments decided through discussion to let China Internet Network Information Center (CNNIC) organize relevant Internet entities to jointly carry out an Internet development survey. Ever since then, CNNIC has published 31 statistical reports on Internet development in China, and this report is the 32nd report. Internet has become a key sector that affects the development of our society and economy and changes people's lifestyle. All the reports of CNNIC have witnessed the whole development process of China's soaring Internet industry. With precise and objective data, the reports provide significant basis for government departments and companies to understand the development of Internet in China and make relevant decisions. Therefore, they have attracted much attention from all circles and have been cited widely both at home and abroad.

Since 1998, CNNIC has been issuing the Statistical Report on Internet Development in China every January and July by convention. The continuous survey and study on the scale of Internet users, structural features, access modes and network applications were provided in the 32nd report, which follows regular contents and style.

Data collection in this Report also received great support from the government, enterprises and all walks of life. All surveys went smoothly under the guidance of the Ministry of Industry and Information Technology, and data collection of basic resources was completed in time with the close cooperation of Internet organizations, survey websites and media. We hereby express our sincere gratitude to all of them. Meanwhile, we would like to extend our sincere thanks to Internet users who have participated in our 32nd statistical survey on Internet development.

China Internet Network Information Center

July 2013

Contents

Abstract

1. Basic Information

◇ By the end of June 2013, the number of Internet users in China had reached 591 million, a growth of 26.56 million over the end of 2012. The Internet penetration rate was 44.1%, a growth of 2.0% compared with that at the end of 2012.

◇ By the end of June 2013, China had 464 million mobile Internet users, a growth of 43.79 million compared with that at the end of 2012. Among all the Internet users, the proportion of those using mobile phone to access the Internet rose to 78.5%.

◇ By the end of June 2013, the rural Internet users had accounted for 27.9% of the total in China, reaching 165 million, which rose slightly compared with the figure in 2012, up by 9.08 million.

◇ The ratio of Internet users using desktops dropped slightly to 69.5% by 1.1% compared with the figure at the end of 2012; the ratio of Internet users using mobile phones to access the Internet was 78.5%, up by 4.0% over the end of 2012. In June 2013, the ratio of Internet users using desktops kept dropping, but the ratio of Internet users using mobile phones rose quickly.

◇ China had a total of 14.70 million domain names, including 7.81 million ".CN" domain names, up by 4.0% compared with that at the end of 2012, accounting for 53.1% of the total domain names in China; the number of ".中国" domain names reached 270,000. The total number of websites rose to 2.94 million.

2. Trends and Features

Mobile phone became the No.1 source of new Internet users

During the first half of 2013, 70.0% of the new Internet users used mobile phone to access the Internet, and mobile phone became the No.1 source of new Internet users. In terms of Internet access device, the proportion of those using mobile phones to access the Internet rose to 78.5%, while the proportion of those using desktops to access the Internet dropped slightly. Mobile phone further strenghthened its position as the top Internet access terminal.

The size of instant messaging users grew the most, and the development of mobile phone terminal exceeded the overall level

By the end of June 2013, the number of instant messaging users in China had reached 497 million, a growth of 29.31 million over the end of 2012, ranking No.1 amongst that of the users of

all applications on mobile phone; the utilization ratio was 84.2%, up by 1.3% over the end of 2012, remaining No.1 and keeping rising, especially, the mobile phone terminal developed rapidly. The number of users of mobile instant messaging was 397 million, a growth of 45.2 million over the end of 2012, the utilization ratio was 85.7%, and both of the growth rate and utilization ratio exceeded the overall level of development of instant messaging.

Online entertainment applications on PC witnessed weak growth, while that on mobile phone stood out

Compared with that of 2012, the size of users of online entertainment applications did not grow significantly, the utilization ratio showed little change, the utilization ratio of online game even dropped slightly, and the development of the entire industry slowed down. Meanwhile, mobile phone became a key breakthrough point. The number of users of mobile online music, mobile online video, mobile online game and mobile online literature grew favorably by 14.0%, 18.9%, 15.7% and 12.0% respectively over the end of 2012.

E-commerce applications on mobile phones witnessed an all-around growth in utilization ratio, led by mobile online payment

E-commerce applications witnessed fast development in the field of mobile phone terminal, which saw greater growth than that of other applications, of which the utilization ratio of mobile online payment took a lead, up by 3.9% over the end of 2012, and the size of mobile online payment users increased by 43.0%. In addition, the utilization ratios of mobile shopping, mobile group-buying and mobile online banking grew by 3.3%, 2.1% and 2.7% respectively compared with that at the end of 2012.

Chapter I Introduction

I. Survey Methodology

(I) Survey on Individual Internet Users

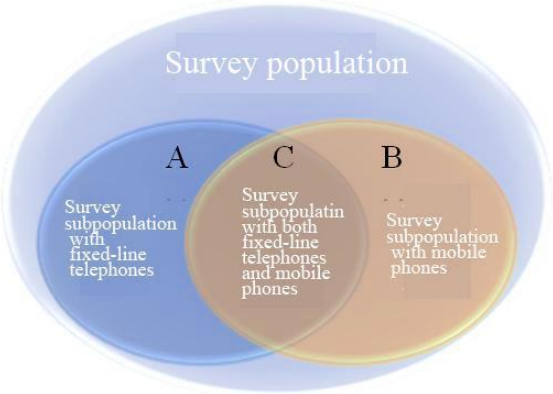
1.1 Survey Population

Permanent residents at the age of 6 or above who have fixed-line telephones (including home phones, PHS and dormitory telephones) or mobile phones

◇ Sample size

There were 30,000 survey samples in total, including 15,000 for fixed-line telephones and the other 15,000 for mobile phones, covering 31 provinces, autonomous regions and municipalities directly under the Central Government in Mainland China.

◇ Division of survey population



The survey population can be divided into three categories:

Subpopulation A: Survey subpopulation using fixed-line telephones (including residents with home phones, PHS users, students with dormitory telephones, and other users with dormitory telephones);

Subpopulation B: Survey subpopulation with mobile phones;

Subpopulation C: Survey subpopulation with both fixed-line telephones and mobile phones (there is overlap between subpopulation A and subpopulation B, the overlapped part is subpopulation C), C=A∩B.

1.2 Sampling method

CNNIC surveys subpopulation A, B and C. Double sampling is adopted for the survey so as to cover more Internet users. The first sampling frame is subpopulation A, the people with fixed-line telephones. The second sampling frame is subpopulation B, the people with mobile phones.

For the survey population with fixed-line telephones, stratified two-stage sampling is adopted. To ensure the sufficient representation of samples, the whole country is divided into 31 tiers according to the province, autonomous region and municipality directly under the central government and the sampling is made independently at each tier.

The self-weighted sampling method is adopted for each province. The sample sizes are allocated for each district, city and prefecture (including the governed districts and counties) in accordance with the proportion of the people at the age of 6 or above in the city covered by fixed-line telephones in the total population covered in the whole province.

Sampling in subpopulation B is the similar to that in subpopulation A. The whole country is divided into 31 tiers according to the provinces, autonomous regions and municipalities directly under the central government, and sampling is made independently in each tier. Samples are allocated in accordance with the proportion of the residents in each district or city to make the sample allocation in each province conform to the self-weighting method.

To ensure the residence fixed-line telephones are taken with almost the same probability in each district, city or prefecture, that is, the local number with more residence fixed-line telephones have will more likely be taken, and for easier operability in the visit and implementation work, the residence fixed-line telephone numbers in each district, city and prefecture are taken according to the following procedures:

The survey of the subpopulation with mobile phones is to take all mobile phone local numbers in each district, city and prefecture; then certain 4-digit numbers are generated randomly in combination with the valid sample size in each district, city or prefecture, and then combined with the mobile phone numbers in each district, city or prefecture to form a number library (local number + the random 4-digit number); randomly order the number library; dial and visit the randomly ordered number library. Survey of the subpopulation with fixed-line telephones is similar to that of the subpopulation with mobile phones: a random number is generated to form a telephone number with the local number, then these numbers are dialed and visited. To avoid repeated sampling, only the people with fixed-line telephones are visited.

1.3 Survey method

The computer-assisted telephone interviewing (CATI) system is adopted for the survey.

1.4 Differences between survey population and targeted population

A study for the population who are not covered by telephones in 2005 by CNNIC shows that Internet users are very few in this subpopulation. Currently, the subpopulation is downsizing

gradually with the development of our telecom industry. In this survey, there is an assumption, i.e.

Internet users who are not covered by fixed-line telephones and mobile phones are negligible.

(II) Automatic Online Search and Data Report

Automatic online search is used to conduct technical statistics about the quantity of domain names and websites, and their geographical distribution. Statistical data for reporting mainly includes the number of IP addresses and international Internet bandwidth.

2.1. Total number of IP addresses

The data of IP addresses counted by provinces come from the IP address databases of Asia-Pacific Network Information Center (APNIC) and CNNIC. Registered data that can clearly distinguish the provinces of the addresses in each database can be added respectively by provinces to generate data of each province. As address allocation is a dynamic process, the statistical data are only for reference. The Ministry of Industry and Information Technology, as the national competent department of IP addresses, will require our IP address allocation organizations (such as China Telecom) to report the IP addresses they own biannually. To ensure accuracy of IP data, CNNIC will compare and verify APNIC statistical data and the reported data to confirm the final quantity of IP addresses.

2.2. Total number of domain names and websites in China

Total number of domain names and websites in China can be derived from:

Number of domain names: The number of domain names with .CN and .中国 comes from CNNIC database; the number of gTLDs comes from the data released by WebHosting.Info, a domain name statistical agency.

Number of websites: It is worked out by CNNIC according to the list of domain names. The list of .CN and.中国 domain names comes from CNNIC database, and the list of gTLDs is provided by relevant international domain name registries. .COM and .NET are provided by Verisign, and .ORG are provided by Public Interest Registry (PIR).

2.3. International Internet bandwidth

The Ministry of Industry and Information Technology can regularly obtain the number of total bandwidth of Internet connecting Chinese carriers with other countries and regions through the report system of telecom enterprises. The reported data are included in the Statistical Report on Internet Development in China.

II. Definitions of Terms in the Report

◇ **INTERNET USERS:** Chinese residents at the age of six or above who have used Internet in the past 6 months.

◇ **Mobile INTERNET USERS:** Internet users who have used mobile phones to access and surf Internet in the past 6 months, but not limited to those surfing Internet via mobile phones only.

◇ **Computer INTERNET USERS:** Internet users who have used computer to access and surf Internet in the past 6 months, but not limited to those surfing Internet via computers only.

◇ **Rural INTERNET USERS:** Internet users who have been living in rural areas of China in the past 6 months.

◇ **Urban INTERNET USERS:** Internet users who have been living in urban areas of China in the past 6 months.

◇ **IP address:** As the basic resource in Internet, the IP address functions to identify online computers, servers and other devices on Internet. Internet access can be realized only when an IP address (in any form) has been acquired.

◇ **Domain name:** A hierarchical and structural character identifier on the Internet used to identify and locate computer, corresponding to the Internet Protocol (IP) address of the computer. Domain names at different levels in the Internet domain name system of China comprise of letters (A-Z, a－z, case insensitive), digits (0－9), hyphens (－) or Chinese characters; English domain names at various levels shall be spaced by solid dot (.), while Chinese domain names at various levels shall be spaced by solid dot or Chinese period (。). Common domain names are divided into two categories: country code top-level domain (ccTLD), such as the domain names ended with ".CN" which represents China; and generic top-level domain (gTLD), such as the domain names ended with ".COM", ".NET" and ".ORG".

◇ **Website:** It refers to domain name itself or the web sites with URL of "WWW. + domain name", including the web sites under our top-level domain name ".CN" and gTLD. The registrant of the website is within the territory of P.R.C. For example: for the domain name of "cnnic.cn", it has only one website and the corresponding web address is "cnnic.cn" or "www.cnnic.cn". Other web addresses like "whois.cnnic.cn" and "mail.cnnic.cn" with such domain name as the suffix are regarded as different channels of the website.

◇ **Scope of survey:** Unless otherwise expressly indicated, data in this Report only refer to mainland China, excluding Hong Kong, Macao and Taiwan.

◇ **Deadline of survey data:** The deadline of the statistical survey data is 30.06.2013.

Chapter II Size and Structural Features of Internet Users

I. Size of Internet Users

(I) Overall Size of Internet Users

By the end of June 2013, the number of Internet users in China had reached 591 million, up by 26.56 million over the end of 2012. The Internet penetration rate had reached 44.1%[1], up by 2.0% over the end of 2012.

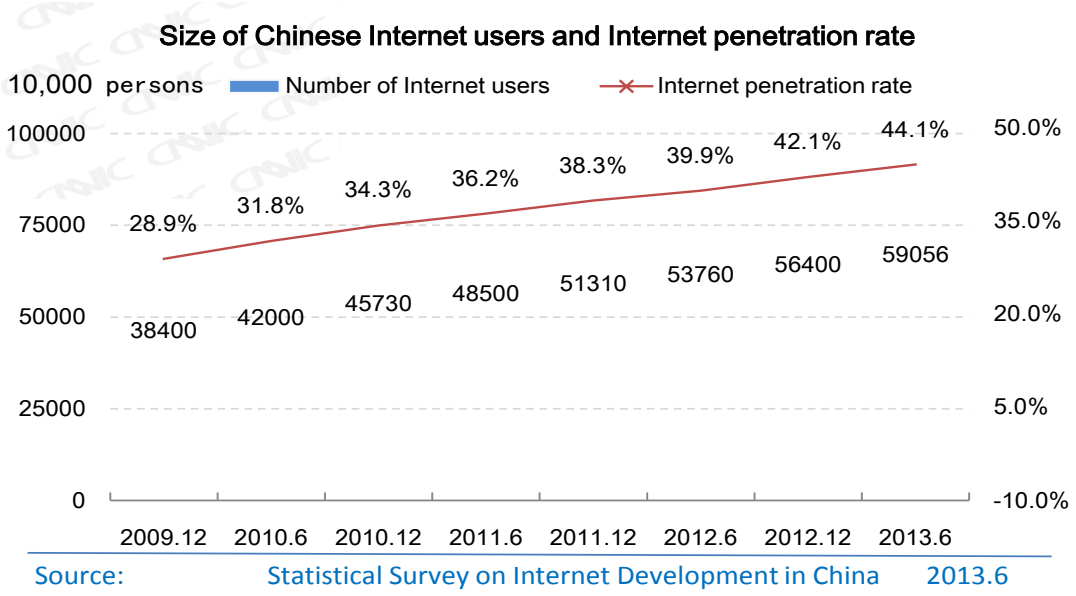


Figure 1. Size of Chinese Internet users and Internet penetration rate

During the first half of 2013, the Internet penetration rate of China grew steadily, this is because that, on the one hand, the Chinese government made a series of policies to promote the informatization process and gradually realized the construction efficiency of basic network facilities in 2012, and popularity of broadband Internet and construction of mobile network directly promoted the use of Internet; on the other hand, the rapid popolarity of 3G and mobile devices and diversity of wireless applications significantly increased the number of mobile Internet users and promoted the rapid development of the Internet in China. Moreover, the

[1] The gross population based on which the penetration rate was calculated comes from "China Statistical Yearbook 2012".

applications of mobile phone terminal took a leading role, and some unique location-based applications of mobile Internet attracted more and more users. By the end of June 2013, the proprotion of mobile phone Internet users to all new Internet users in China had hit 70.0%, higher than that of the proportion of users that access the Internet via other devices, indicating that mobile phone played an important role in popularity of the Internet, and is now the main source for the growth of the Internet.

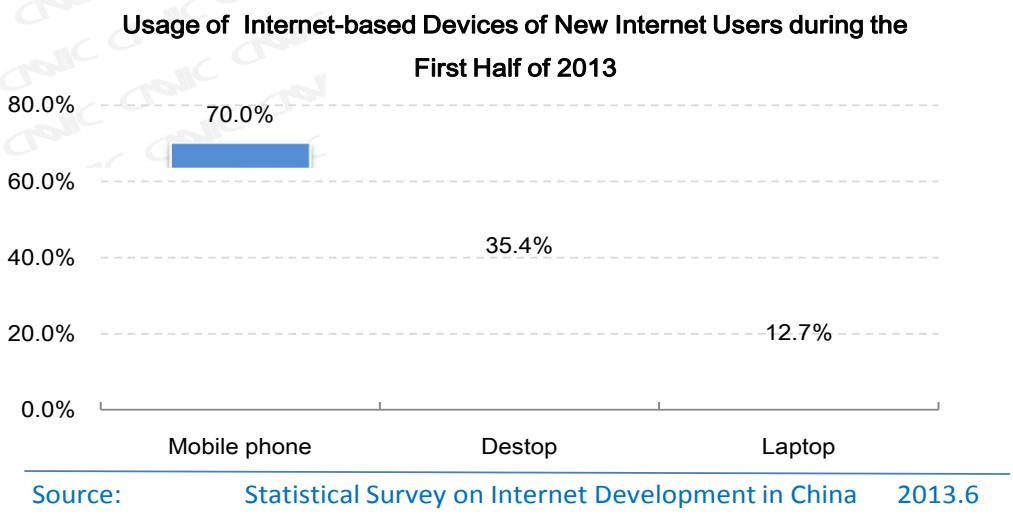


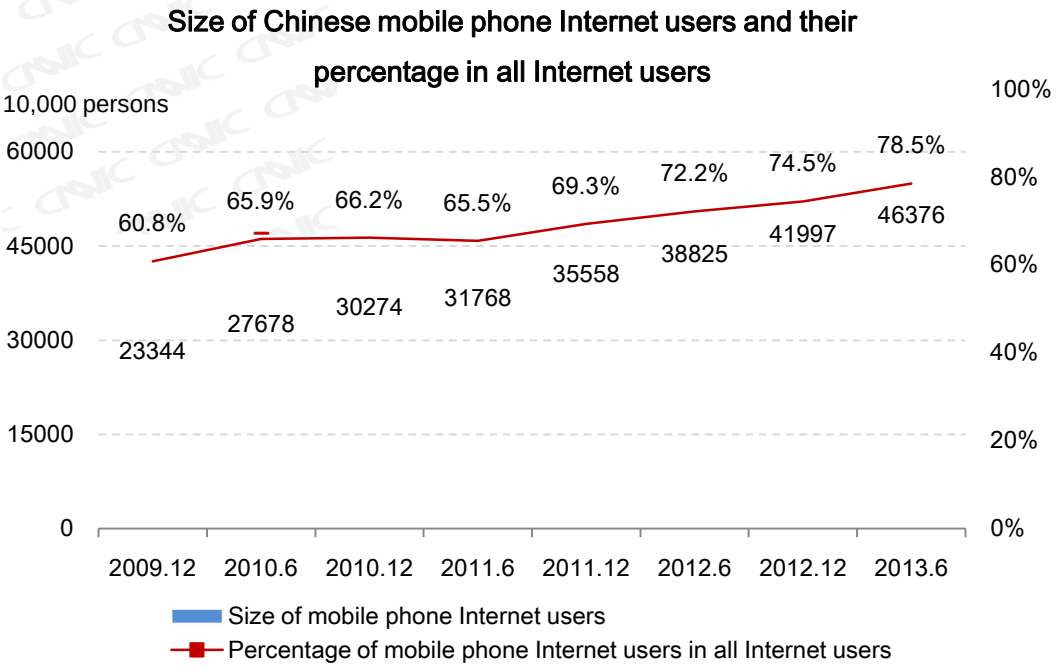
Figure 2. Usage of Internet-based Devices of New Internet Users during the First Half of 2013

In April 2013, 8 ministries and commissions including the Ministry of Industry and Information Technology jointly released "Opinions concerning Implementation of the Special Project of Broadband 2013", pointing out that the goal of 2013 is to deploy broadband Internet in 18,000 administrative villages and realize broadband access or acceleration of transformation in 5,000 middle and primary schools in poverty-stricken rural areas. As is seen from the special project, in the next phase, Internet will be further popularized in rural areas, and the number of rural population using Internet will further rise in the future. In addition, according to the "Opinion", China decided to optimize the environment for development of boardband Internet, strengthen technological innovation, speed up network upgrading and evolution, plan wired and wireless networks as a whole, promote popularization and deeping of applications, strenghen the industrial chain for synergy and progress and improve the online experience, as you see, the construction of basic network facilities will be further strenghthened, the Internet user experience and application innovation model will be also supported, and China's Internet will further develop in terms of the size of Internet users and the depth of application.

(II) Size of Mobile Internet Users

The number of mobile Internet users in China had reached 464 million by the end of June 2013, up by 43.79 million over the end of 2012. Amongst all the Internet users, those using

mobile phones to access the Internet rose from 74.5% to 78.5%, a higher growth rate than that of the second half of 2012. According to the data released by the Ministry of Industry and Information Technology, the number of users who use mobile phone to access the Internet in China had reached 783 million by May 2013. Despite the difference[2], , the data above indicated that the size of Chinese mobile Internet users is huge, and maintains a momentum of rapid development.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 3. Size of Mobile Phone Internet Users

As the third growth cycle of the development hisory of mobile phone Internet, the new round of rapid growth starting from the first half of 2013 benefited from popularity of 3G, development of wireless network (including development of public and private WiFi) and innovation of mobile phone applications. The rapid popolarity of 3G and expanding coverage of wireless network laid a good foundation for mobile phone Internet access in terms of user and network, not only faciliating more users to access the Internet conveniently, but also enhancing various online experiences, especially the use of various big-flow data applications. Various mobile phone applications closely tied to life added more impetus for Internet users to access the Internet through mobile phone, especially, applications based on the demand of real life such as mobile

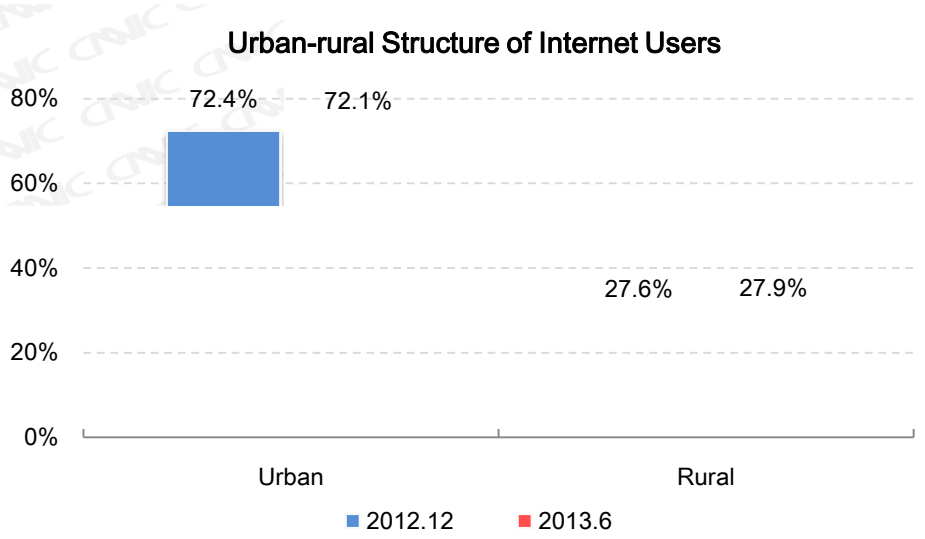
[2]The statistical data of CNNIC and the data released by the Ministry of Industry and Information Technology are different from each other due to the difference in statistical calibers: The statistics of CNNIC was based on the persons who use mobile phone to access the Internet, while the statistics of the Ministry of Industry and Information Technology was based on the user IDs through which users access the Internet (number of user IDs), therefore, the data released by the Ministry of Industry and Information Technology is greater than that released in the survey of CNNIC: 1) A mobile Internet user may use more than one numbers simultaneously, according to the survey conducted by CNNIC, on average, each mobile Internet user has 1.45 mobile phone number; 2) The Internet users recorded by CNNIC through telephone interview only include Internet users who take initiative to access the Internet.

phone map, shopping and payment, etc. satisfied the mobile Internet users' demand for diversified lifestyles, increased their interest in mobile Internet and made such applications more appealing to mobile Internet users.

Mobile phone Internet became a new impetus for development of Internet: On the one hand, the development of mobile phone Internet facilitated popularity of Internet in China, especially, it provides the population and regions that fail to access the Internet due to the limitations of network and terminal, etc. with the possibility of Internet access; on the other hand, mobile phone Internet promoted the growth of Internet-based economy, and the innovation upsurge based on mobile Internet provided traditional Internet-based business with new business model and development space, for example, taxi-taking application software, real-time e-busines logistics and microblog commercialization and so on are considered the innovation models of Internet applications.

(III) Rural Internet users

By the end of June 2013, the rural Internet users accounted for 27.9% of the total in China, reaching 165 million, which rose slightly compared with the figure in 2012, with an increase of 9.08 million. In recent half a year, the growth rate of the size of rural Internet users was 5.8%, slightly higher than that of urban Internet users.

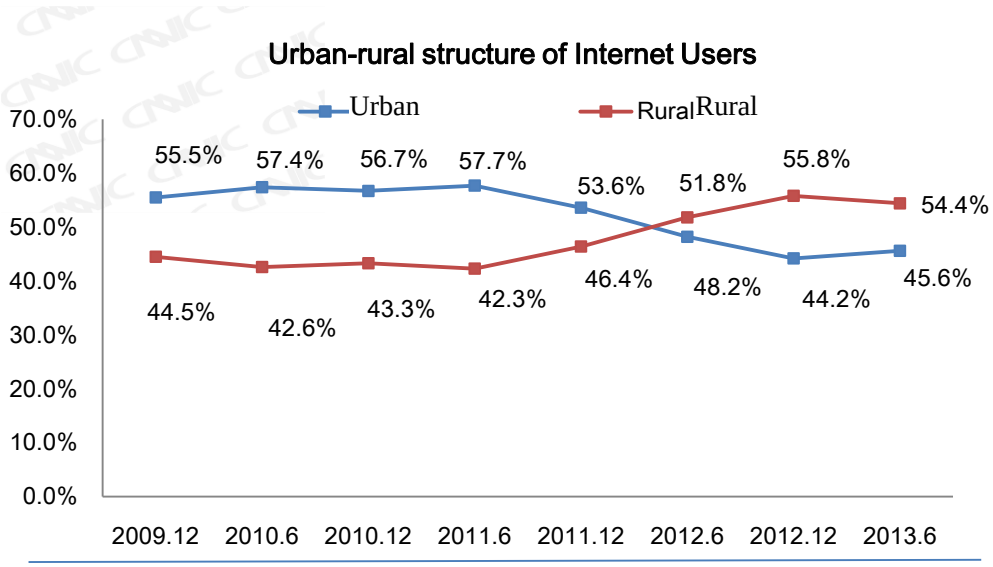


Source: Statistical Survey on Internet Development in China 2013.6

Figure 4. Urban-rural Structure of Chinese Internet Users

In recent years, China sped up its urbanization process, which caused a continuous shrinkage of the proportion of the rural population to its total population. At the end of 2012, the proportion of the rural population of China further declined from 48.7% in 2011 to 47.4%, however, the proportion of rural Internet users to the total Internet users of China did not decline, but increased

slightly, indicating that China was experiencing rapid popularization of the Internet and fast growth of Internet users in rural areas. By the end of June 2013, the number of new Internet users was 26.56 million, including 14.45 million rural Internet users, accounting for 54.4%. It kept up the momentum that the number of new rural Internet users exceeding that of urban Internet users starting from 2012, thereby becoming a key incentive for growth of the Internet in China.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 5. Urban-rural Structure of New Internet Users

II. Attributes of Internet Users

(I) Gender Structure

By the end of June 2013, the sex ratio of Internet users was 55.6:44.4, silimiar to that of 2012. In recent years, the sex ratio of Internet users remained stable.

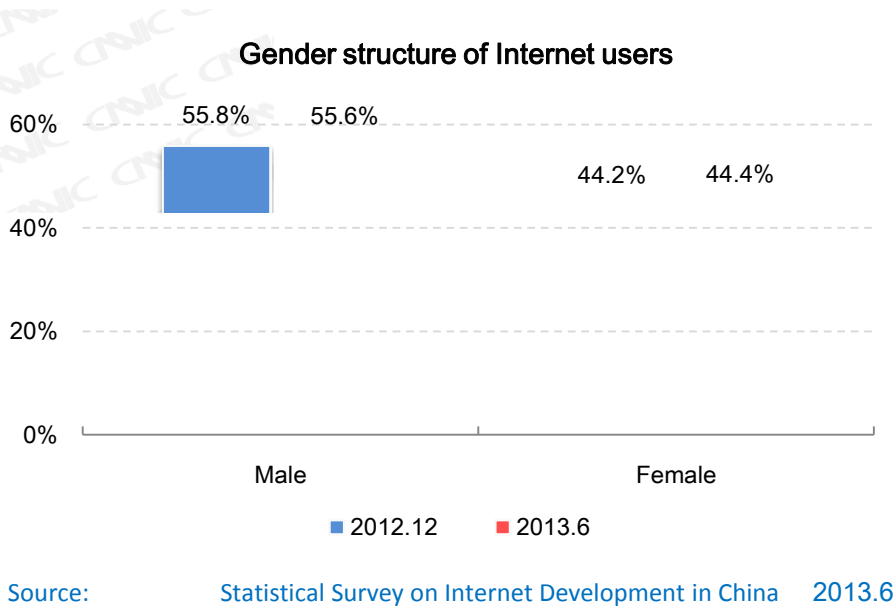


Figure 6. Gender Structure of Chinese Internet Users

(II) Age Structure

By the end of June 2013, the percentage of Internet users above the age of 30 increased at different levels for different age sections, accounting for 46.0%, up by 2.1% over the end of 2012. It indicates that Internet became more popular in middle-aged and old people, which became the main source for growth of Internet users in China.

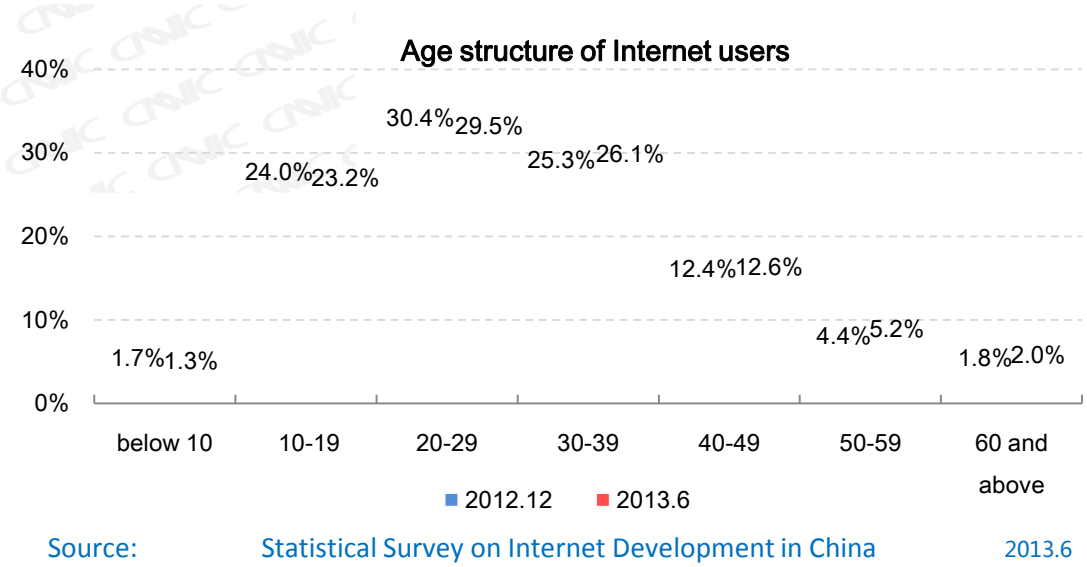
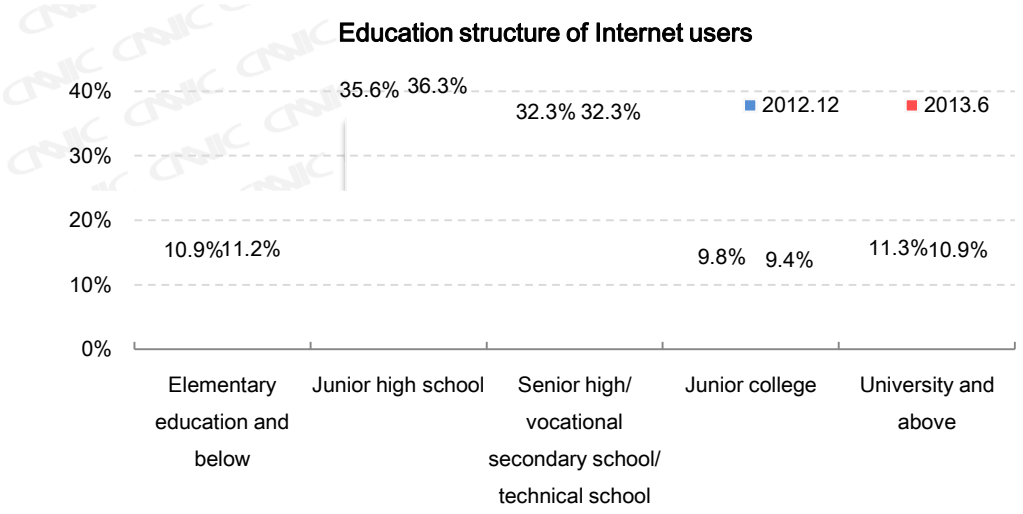


Figure 7. Age Structure of Chinese Internet Users

(III) Education Structure

By the end of June 2013, the percentages of Internet users with the education background of elementary school and below as well as junior high school were 11.2% and 36.3% respectively,

higher than that over the end of 2012, especially, the growth of Internet users with the eduction background of junior high school was remarkable. It indicates that the tendency of increasing Internet users with low education background continued, and the population with the education background of junior high school and below became the main growth point of Chinese Internet users. Internet penetration rate among people with the education background of high school and junior college degree and above has attained a comparatively high level, and the growth possibility was limited in the future.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 8. Education Structure of Chinese Internet Users

(IV) Occupational Structure

Students are the largest group of Internet users, accounting for 26.8% of the total Internet users. The percentage of people of individually-owned business/ freelancers ranked the second, reaching 17.8%. Managers account for 2.8% and general employees account for 10.6% of the total Internet users in companies and enterprises. And among party and government organs and institutions, leaders and general staffs accounted for 0.5% and 3.9% respectively. It is noteworthy that, the proportion of the retired, jobless/unemployed/laid-off people in the entire Internet users rose, up by 3.3% and 11.2% respectively, indicating that the barrier to Internet gradually lowers and thus the Internet attracted more aged people and people with relatively-poor economic condition.

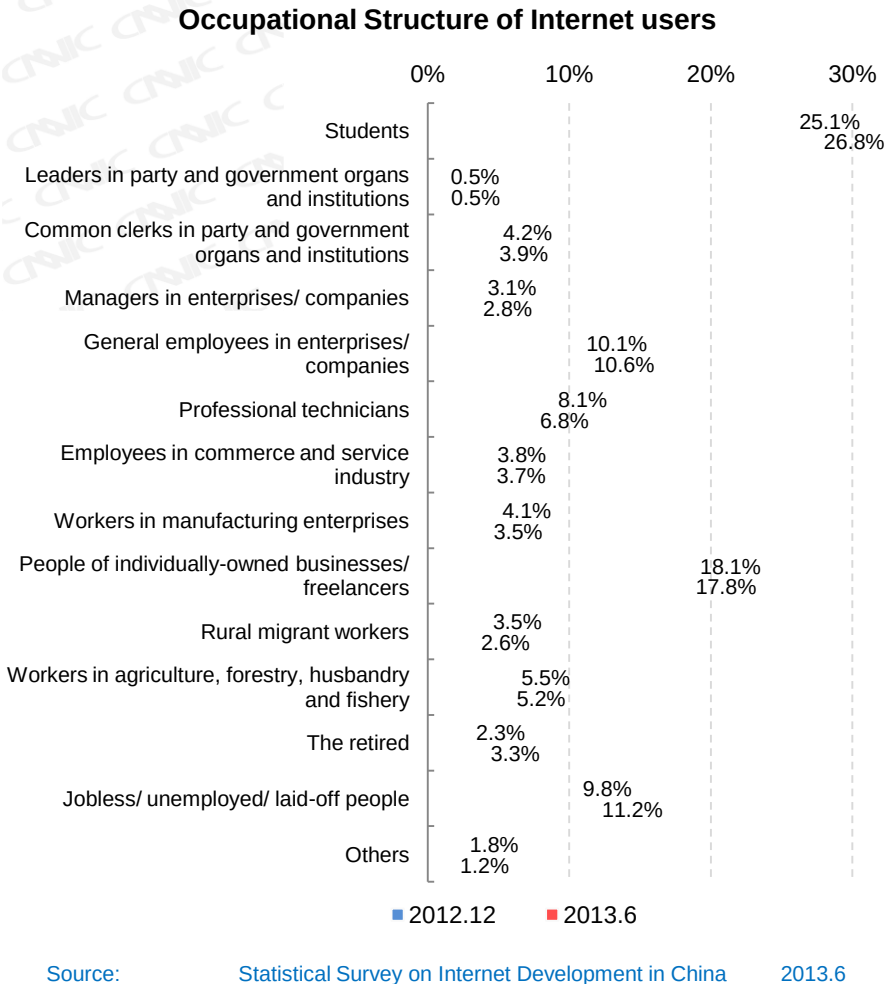
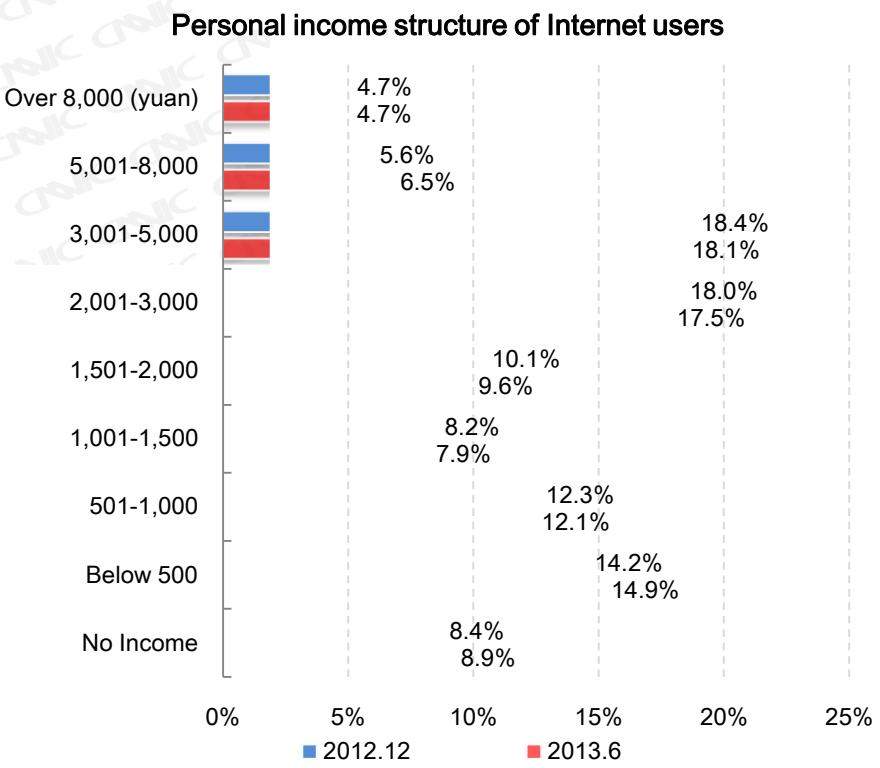


Figure 9. Occupational Structure of Internet users

(V) Income Structure

Internet users with monthly income of RMB500 and below and jobless people account for 14.9% and 8.9% respectively, which are higher than that the end of 2012. The continuous decline of prices increased the popularity of mobile devices amongst low-income people.



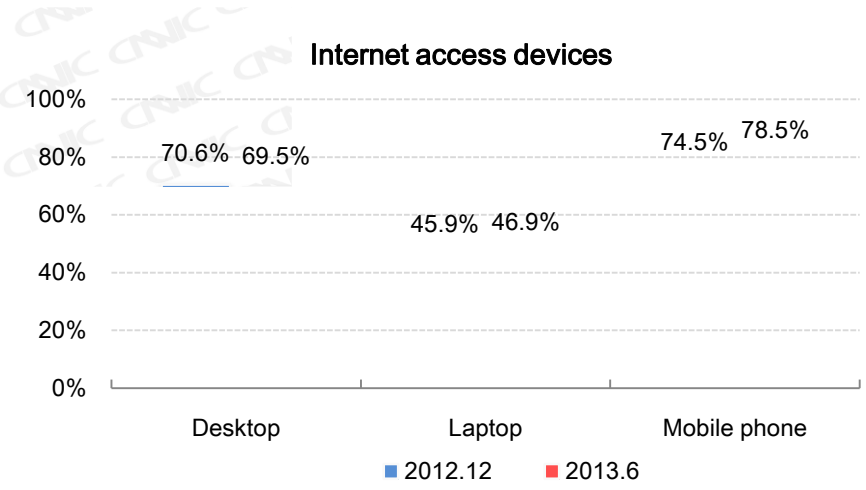
Source: Statistical Survey on Internet Development in China2013.6

Figure 10. Structure of Monthly Income of Chinese Internet Users

III. Access Modes

(I) Internet Access Devices

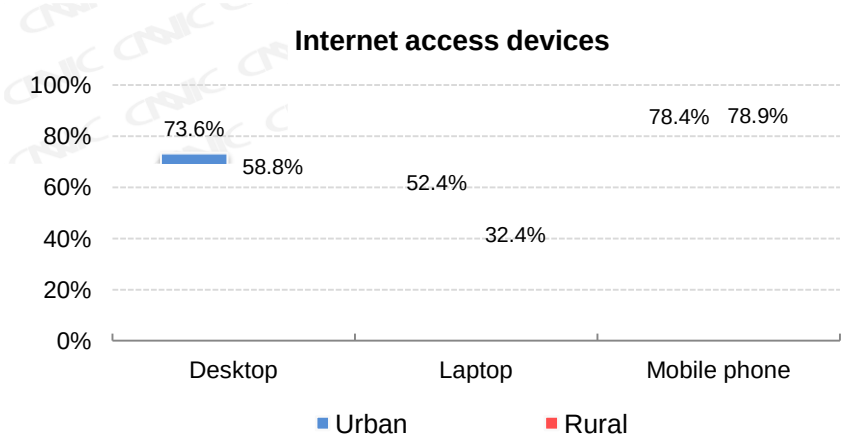
In June 2013, the ratio of Internet users using desktops continued to drop, and the ratio of Internet users using mobile phone rose quickly. 69.5% of the Internet users access the Internet via desktops, down by 1.1% compared with that at the end of 2012. The proportion of Internet users who access the Internet via mobile phone was 78.5%, up by 4.0% over the end of 2012.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 11. Internet Access Devices

The continuous decline of the prices of smart mobile phones and rapid popularity of 3G network made Internet more accessible, thereby providing the people and areas (especially those residents in remote rural areas) that are restricted in network access and terminal availability with possibilities of Inernet access. Mobile phone became the major device for rural Internet users to access the Internet, and its utilization ratio reached 78.9%, far higher than that of desktops and laptops, indicating that mobile phone further increased popularity of the Internet in China while satisfying the basic demands of these people for Internet access.



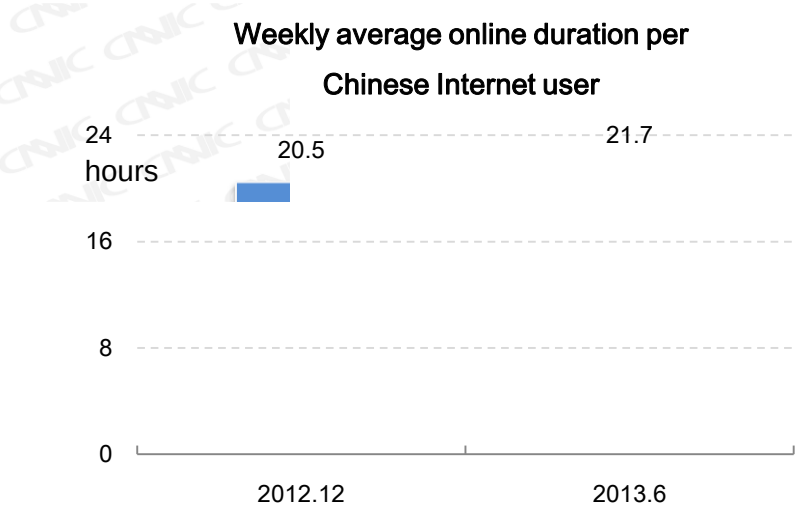
Source: Statistical Survey on Internet Development in China

Figure 12. Internet Access Devices for Chinese Urban-rural Internet Users

(II) Online Duration

During the first half of 2013, weekly average online duration was 21.7 hours, 1.2 hours more than that of the second half of 2012. On the one hand, development of WiFi and 3G, etc. made Internet users better make use of their fragmented time, and both available locations for Internet

access and online frequency increased. According to a survey made by CNNIC[3], the utilization ratio of mobile users of WiFi Internet in various applications is higher than that of non-WiFi mobile users, the feature is particularly obvious for the use of applications with high demand for data traffic; on the other hand, Internet users constantly increased its use of Internet in terms of breadth and depth, remarkably increasing Internet users' addiction to and online duration of the Internet, for example, mobile Internet users were shifting gradually from relatively simple applications such as fragmented reading and news to social intercourse and applications of life services with longer online duration and greater addiction, thereby increasing the overall online duration of the Internet.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 13. Weekly Average Online Duration of Internet Users

During the first half of 2013, weekly average time spent by Internet users on mobile phone Internet was 11.8 hours, indicating that mobile Internet users depend heavily on the Internet. According to a survey made by CNNIC[4], 79.9% of the mobile Internet users access the Internet at least once every day via mobile phone, of which nearly 60% of the total mobile Internet users access the Internet more than one time every day via mobile phone. Main reasons: On the one hand, it is convenient for mobile phone users to access the Internet by making use of their fragmented time anytime and anywhere, thus increasing the operating frequency of mobile phone; on the other hand, mobile phone application software, with its abundant features that almost cover all aspects of life, made mobile Internet users' work and life more convenient and increased the attraction of mobile phone.

[3] Research Report of CNNIC on Online Behaviors of Mobile Internet Users, 2012
[4] 2013Statistical Report of CNNIC on Development of Mobile Internet in 2012

Chapter III Basic Internet Resources

I. Overview of Basic Resources

China has 331 million IPv4 addresses and 14607/32s of IPv6 addresses at the end of June 2013.

China has 14.69 million domain names in total, among which ".CN" domain names reached 7.81 million, a 4.0% growth compared with that at the end of 2012 and took up 53.1% of all domain names in China; and the number of ".中国" domain names reached 270,000.

There were altogether 2.94 million websites, a growth of 9.6% compared with that at the end of 2012.

International Internet bandwidth reached 2,098,150Mbps, with a growth rate of 10.4% compared with that at the end of 2012.

Table 1. Comparison of Basic Resources of Internet in China between December 2012 and June 2013

	December 2012	June 2013	Growth	Growth rate
IPv4	330,534,912	330,617,088	82,176	0.02%
IPv6 (/32s)	12,535	14,607	2,072	16.53%
Domain name	13,412,079	14,694,769	1,282,690	9.56%
Wherein, .CN Domain name	7,507,759	7,808,360	300,601	4.00%
Website	2,680,702	2,939,232	258,530	9.64%
Wherein, .CN website	1,036,864	1,145,367	108,503	10.46%
International Internet bandwidth (Mbps)	1,899,792	2,098,150	198,358	10.44%

II. IP Addresses

By the end of June 2013, the number of IPv6 addresses in China had reached 14,607/32s, a remarkable 16.5% growth compared with that of the same period last year, ranking the second worldwide. At present, all major operators are giving great impetus to the IPv6 industrial chain and actively carrying out pilot work for commercialization, so as to gradually expand the size of IPv6 users and network.

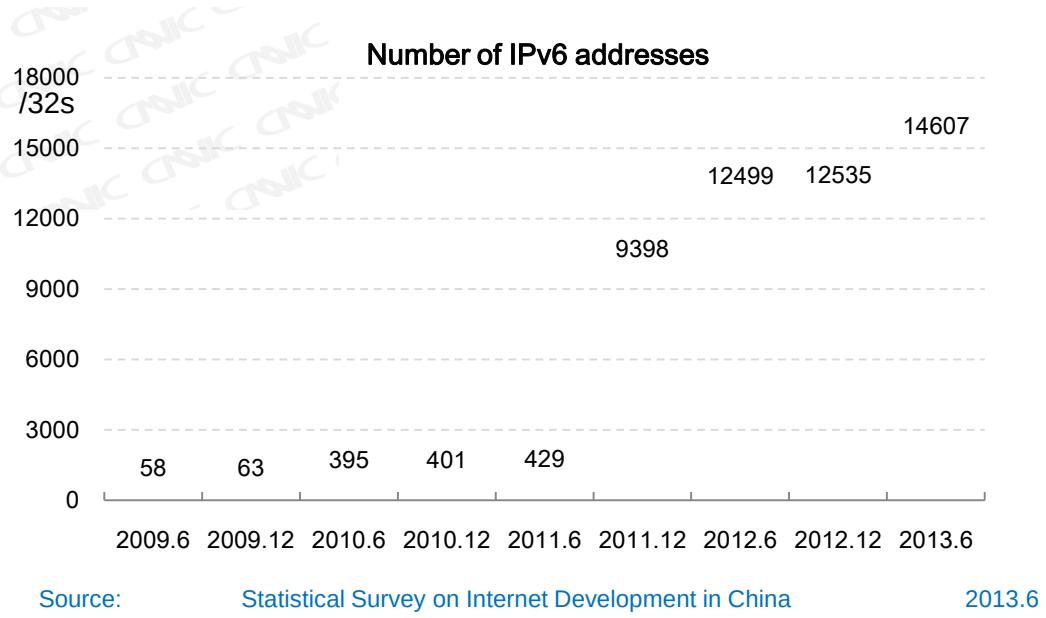


Figure 14. Number of IPv6 addresses in China

All of the IPv4 addresses had been assigned by February 2011; therefore, the total number of IPv4 addresses in China has been remaining unchanged since 2011, and it reached 331 million at the end of June 2013.

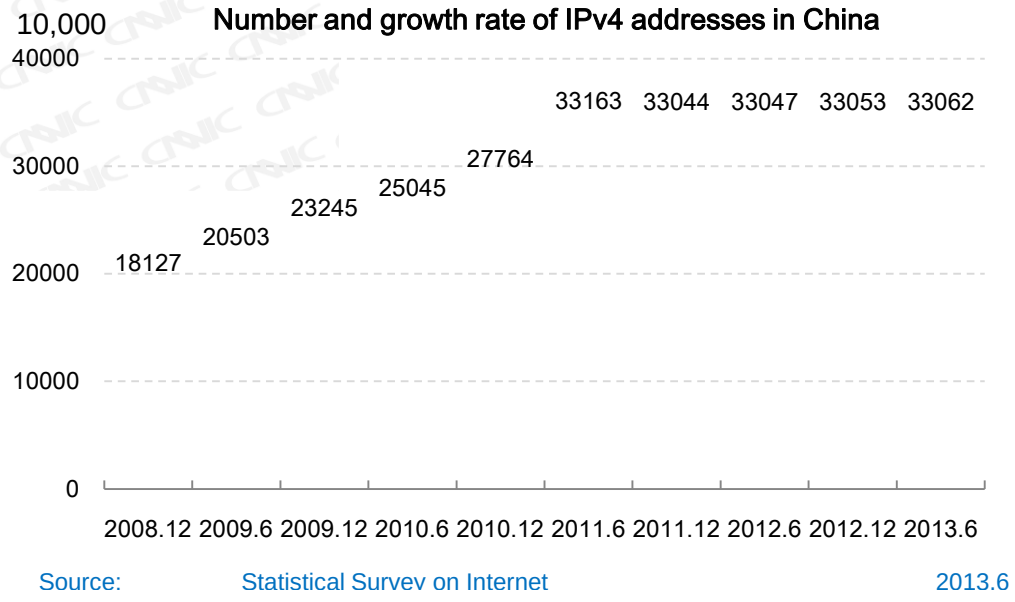


Figure 15. Number of IPv4 Addresses

III. Domain Names

By the end of June 2013, the total number of domain names of China had increased to 14.69

million, growing by 9.6% compared with that at the end of 2012.

Table 2. Number of Domain Names in each Category[5]

	Number	Proportion in total domain names domain names
CN	7,808,360	53.1%
COM	5,606,607	38.2%
NET	694,570	4.7%
中国	273,384	1.9%
ORG	161,245	1.1%
INFO	127,654	0.9%
BIZ	22,606	0.2%
Others	343	0.0%
	14,694,769	100.0%

The number of .CN domain names had reached 7.81 million by the end of June 2013, increasing by 4.0% compared with that at the end of 2012 and accounting for 53.1% of all domain names of China; and .COM domain names were 5.61 million, taking up 38.2%.

Table 3. Number of .CN domain names in each category

	Number	Proportion in total CN domain names
cn	6,484,128	83.0%
com.cn	1,017,350	13.0%
net.cn	134,188	1.7%
org.cn	62,188	0.8%
gov.cn	53,776	0.7%
adm	48,251	0.6%
ac.cn	4,311	0.1%
mil.cn	64	0.0%
edu.cn	4,104	0.1%
Total	7,808,360	100.0%

IV. Websites

By the end of June 2013, the number of websites [6] was 2.94 million, an growth of 260,000, or 9.6%.

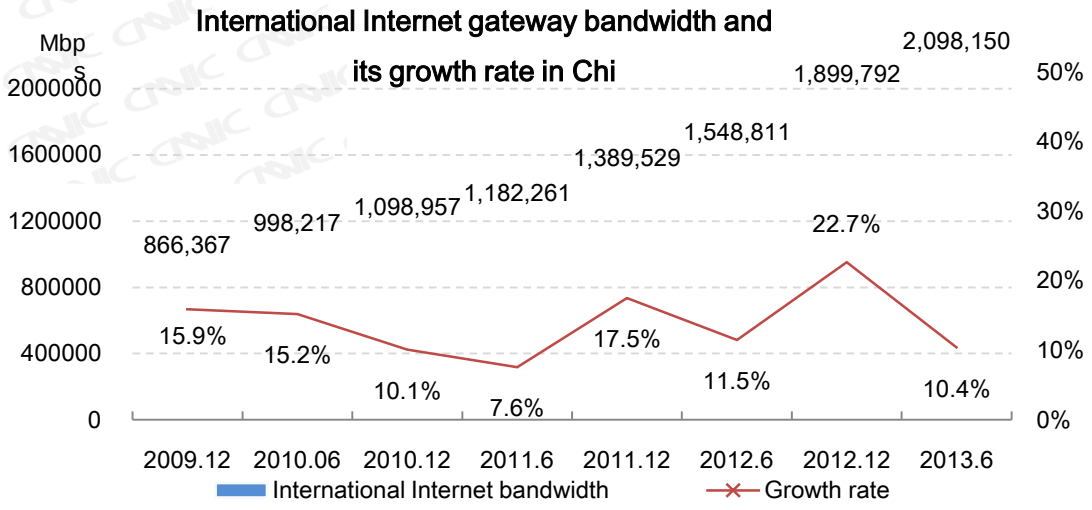
[5] Note: gTLDs come from the data released by WebHosting.Info (a statistical organ) on July 1.
[6] It refers to the websites whose domain name registrants are within the territory of the P.R.C.

Source: Statistical Survey on Internet Development in China

Figure 16. Number of Websites in ChinaNote: Websites with the domain name of ".EDU.CN" are excluded.

V. International Internet Bandwidth

By the end of June 2013, China had 2,098,150Mbps of international Internet Gateway bandwidth, up by 10.4% over the end of 2012.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 17. Changes of China's International Internet Gateway Bandwidth

Table 4. International Internet Gateway Bandwidth of Major Backbone Networks

	International Internet bandwidth (Mbps)
China Telecom	1,118,249

China Unicom	677,205
China Mobile	244,594
China Education and Research Network	35,500
China Science and Technology Network	22,600
China International Economy and Trade Net	2
Total	2,098,150

Chapter IV Internet Applications of INTERNET USERS

I. Overall Condition of Internet Applications

The use of Internet applications during the first half of 2013 had a similar tendency to that in 2012 and grew steadily. The size of users of instant messaging, as No. 1 Internet application, kept rising; e-commerce applications maintained a momentum of rapid growth; the utilization ratios of traditional Internet applications such as e-mail and forum/BBS kept declining.

The size of Internet users of instant messaging increased the most, especially its development on mobile phone terminals exceeded the overall level

By the end of June 2013, the number of instant messaging users reached 497 million, up by 29.31 million over the end of 2012, ranking No.1 in growth of all applications; the utilization ratio was 84.2%, up by 1.3% over the end of 2012. The utilization ratio of instant messaging (especially those on mobile phone terminal) remained No.1 and kept rising. The number of mobile instant messaging users was 397 million, up by 45.20 million over the end of 2012, and the utilization ratio was 85.7%. Both of the growth rate and utilization ratio of Internet users exceeded the overall development level of instant messaging.

Entertainment-related applications on PC witnessed weak growth, and that on mobile phone terminal became an important breakthrough point

Compared with that of 2012, the number of users of various online entertainment applications did not grow significantly, neither did the utilization ratio, and the utilization ratio of online game even dropped slightly. The development of the entire sector slowed down, but entertainment applications on mobile phone became an important breakthrough point. The number of users of mobile online music, mobile online video, mobile online game and mobile online literature increased favorably by 14.0%, 18.9%, 15.7% and 12.0% respectively over the end of 2012.

E-commerce applications on mobile phones witnessed an all-around significant growth in utilization ratio, of which mobile online payment took a lead

E-commerce applications witnessed fast development in the field of applications of mobile phone terminal, which saw greater growth than that of other applications, and the utilization ratio of mobile online payment grew the most. Compared with that at the end of 2012, the utilization ratio and the size of Internet users increased by 3.9% and 43.0% respectively. In addition, the utilization ratios of mobile shopping, mobile online banking and mobile group shopping grew up

3.3%, 2.7% and 2.1% respectively over the end of 2012.

Table 5. Utilizaiton Ratio of Network Applications in China between December 2012 and June 2013

	June 2013		December 2012		
Applications	**Number of Internet users (10,000)**	**Utilization ratio**	**Number of Internet users (10,000)**	**Utilization ratio**	**Growth rate**
Instant messaging	49706	84.2%	46775	82.9%	6.3%
Search engine	47038	79.6%	45110	80.0%	4.3%
Online news[7]	46092	78.0%	39232	73.0%	17.5%
Online music	45614	77.2%	43586	77.3%	4.7%
Blog/personal space	40138	68.0%	37299	66.1%	7.6%
Online video	38861	65.8%	37183	65.9%	4.5%
Online games	34533	58.5%	33569	59.5%	2.9%
Microblog	33077	56.0%	30861	54.7%	7.2%
Social networking websites	28800	48.8%	27505	48.8%	4.7%
Online shopping	27091	45.9%	24202	42.9%	11.9%
Online literature	24837	42.1%	23344	41.4%	6.4%
E-mail	24665	41.8%	25080	44.5%	-1.7%
Online payment	24438	41.4%	22065	39.1%	10.8%
Online banking	24084	40.8%	22148	39.3%	8.7%
Forum/bbs	14098	23.9%	14925	26.5%	-5.5%
Travel booking[8]	13256	22.4%	11167	19.8%	18.7%
Group buying	10091	17.1%	8327	14.8%	21.2%
Online stock trading	3256	5.5%	3423	6.1%	-4.9%

(I) Acquisition of Information

1. Search engine

The number of users of search engine had reached 470 million in China by the end of June 2013, repesenting an increase of 19.28 million, or 4.3%, over the end of 2012; the utilization ratio was 79.6%, remaining basically the same as that of the end of 2012. As a basic application on the Internet, search engine is an important tool for Internet users to obtain information. Its utilization ratio had been keeping around 80% since 2010, making it the No. 2 application on the Internet.

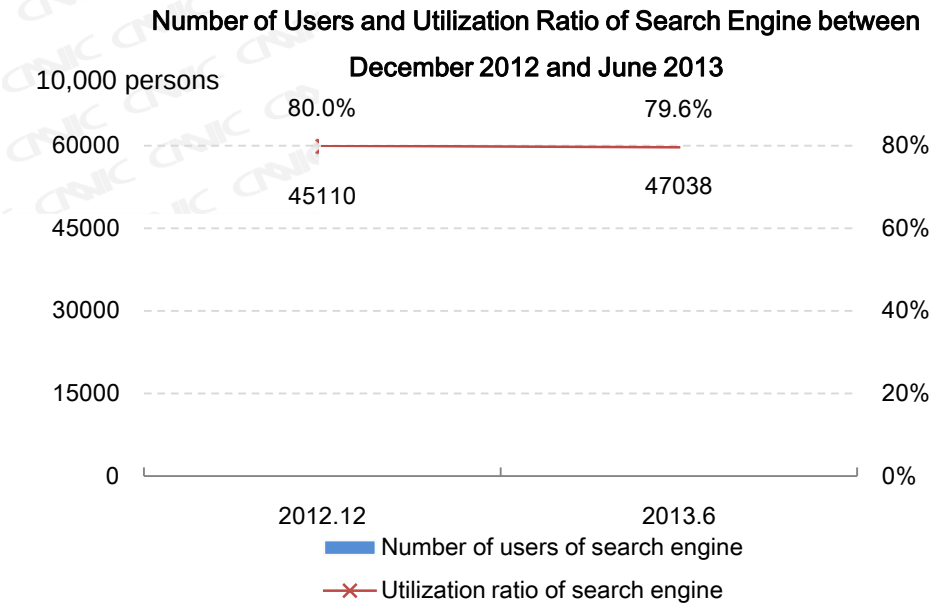
As a whole, the use of search engine entered the stage of steady development and became more diversified: First of all, diversity of search website, besides the traditional comprehensive

[7] Online news: No survey on the users of online news was made in December 2012, and the data here were collected in June 2012.

[8] Travel booking: It is defined in this report as booking air tickets, hotel, train tickets and travel routes via Internet in the last 6 months.

search, there are microblog search, SNS search, e-business website search and other vertical searches, which attracted some search activities that were originally conducted on traditional comprehensive search websites; second, the flow source of search engine also showed a tendency of diversity, in addition to entering a search engine by inputting the URL of the website, Internet users may enter a certain search engine by the browser as well as applications such as instant messaging tool and input method, etc. The above mentioned search portals will also be most coveted by search enterprises; third, the search process developed in a diversified way, and keyword may not only be inputted through the keyboard, but also through voice, photograph and scanning, etc., and the search results are not only displayed by traditional graphics and text, but also presented via map, SMS and voice, etc. The diversified development of search engine satisified the search demands of all persons in different scenarios and made it possible for people to search more conveniently at a lower cost.

In addition, along with the rapid development of mobile Internet, some Internet users turned to mobile search, which will become a new growth point of search companies in the future. Furthermore, search engine enterprises began to pay attention to the field of mobile search, increase technological R&D input and strengthen marketing, so as to take a place in the field of mobile search.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 18. Number of Users and Utilization Ratio of Search Engine in China between December 2012 and June 2013

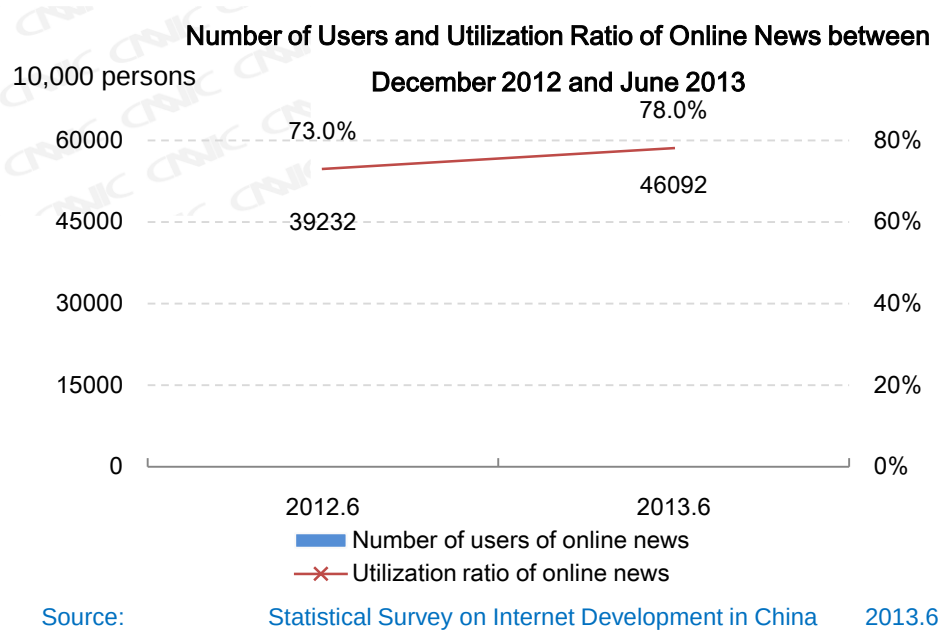
2. Online news[9]

The number of online news users had reached 461 million by the end of June 2013, a growth

[9]Online news: No survey on the data of users of online news was made in December 2012, and the data here were collected in June 2012

of 68.60 million, or 17.5%, compared with that in June 2012; the utilization ratio of online news was 78.0%.

As the basic application of Internet users, online news has become one of major channels for Internet users to get news and its utilization ratio has been remaining high due to the following reasons: First of all, in the era of mobile Internet, it is one of major activities of Internet users to read news in their fragmented time; second, as the applications of microblog and WeChat emerged, Internet users can get news through more channels, for example, microblog spreads major news events rapidly, creates much-discussed topics and coordiantes with mainstream news media, thereby greatly expanding the coverage of online news for Internet users; third, all news media vied with each other to make inroads into the mobile Internet, created large quantities of news applications with favorable user experience and significantly increased the frequency that mobile Internet users read online news; moreover, the communication effect of news on mobile phone terminal is far greater than that of traditional PC, thus making more mobile Internet users read lots of news.



Source: Statistical Survey on Internet Development in China 2013.6

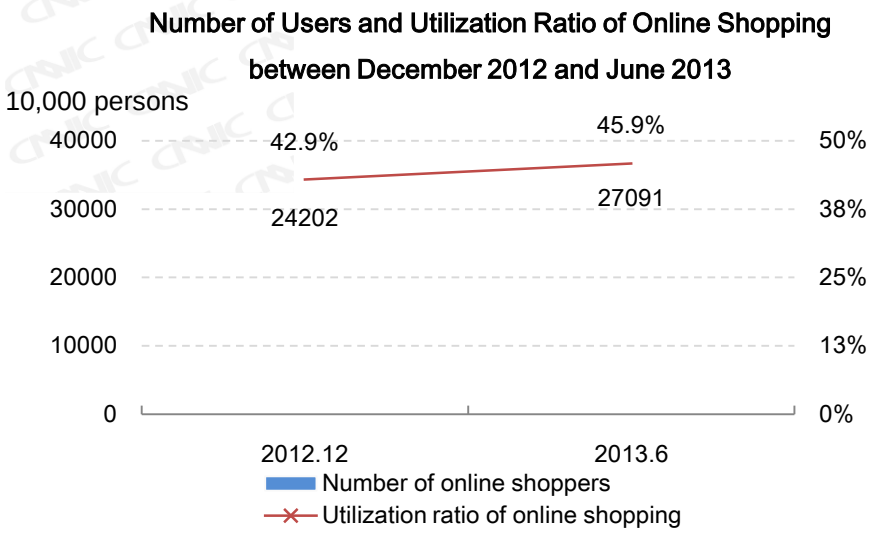
Figure 19 Number of Users and Utilization Ratio of Online News between December 2012 and June 2013

(II) Business Transactions

1. Online shopping

The number of online shopping users had reached 271 million and the utilization ratio of online shopping had risen to 45.9% by the end of June 2013. There was a growth of 28.89 million, or 11.9%, in the number of online shopping users compared with that at the end of December 2012.

The growth of the size of online shoppers were mainly driven by the following 4 factors: First, the continuous growth of the number of Internet users, improvement of the purchase power of Internet users and development of online consumption habit of consumers laid a solid foundation for online shopping and became an important basis for prosperity of the online shopping market. Second, traditional enterprises vied with each other to turn to e-business, thereby expanding the category and channel of online shopping. Enrichment of online products and interaction between online purchase and offline purchase enhanced the users' shopping experiences. Third, frequent online sales promotions stimulated the buying desire of consumers. The fierce competition in the online shopping market gave rise to frequent price wars between e-business companies. The marketing methods including shop celebration, festival & holiday sales promotion, special sale and seckill were more frequently used, greatly stimulating the buying deisre of consumers. Fourth, the development of mobile Internet and popularity of intelligent mobile phone impelled mobile payment and mobile shopping to grow rapidly, and the complementation between applications based on mobile phone and PC boosted the development of the online shopping market.



Source: Statistical Survey on Internet Development in China2013.6

Figure 20. Number of Online Shopping Users and Utilization Ratio of Online Shopping between December 2012 and June 2013

2. Group Buying

The number of Internet-based group shoppers had reached 101 million by the end of June 2013, and the utilization ratio increased to 17.1%, up by 2.3% over the end of 2012. Compared with the end of December 2012, the size of Internet-based group shoppers increased by 21.2%, which represented a relatively high growth rate.

Featuring predatory expansion in 2011, extensive reshuffle in 2012 and low-profile penetration at present, the sector of group purchase gradually adjusts its business model and

begins to focus on product. During the first half of 2013, the growth of the size of Internet-based group shoppers was mainly driven by the frequent group purchase activities -- some Internet users inquired about and bought group purchase ticket only after entering the shopping-related places, thus setting an example for other people.

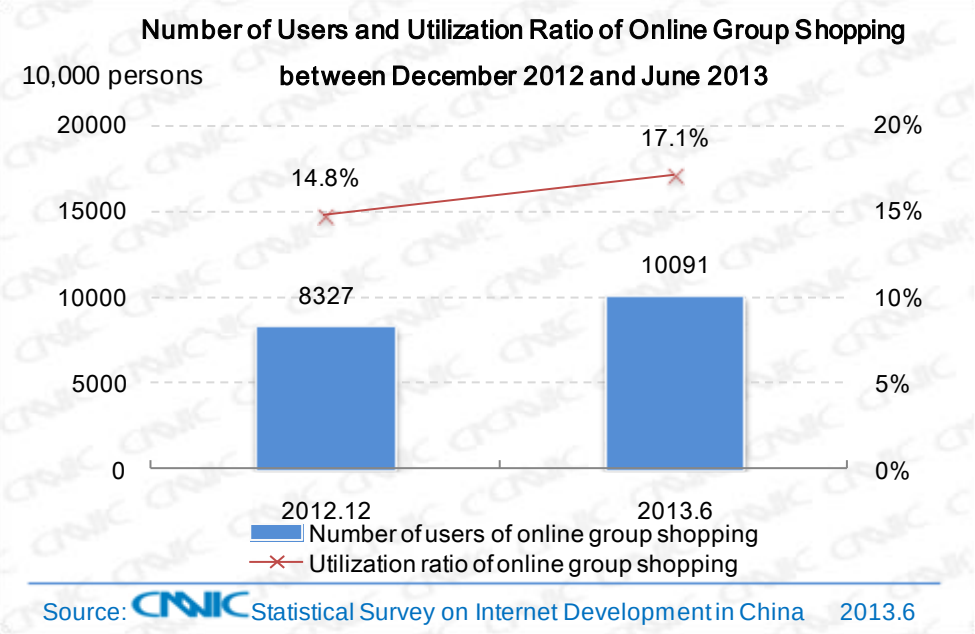


Figure 21. Number of Online Group Shopping Users and Utilization Ratio of Group Shopping between December 2012 and June 2013

3. Online Payment

The number of users and utilization ratio of online payment had reached 244 million and 41.4% respectively by the end of June 2013. Compared with that at the end of December 2012, the size of Internet users increased by 23.73 million, or 10.8%.

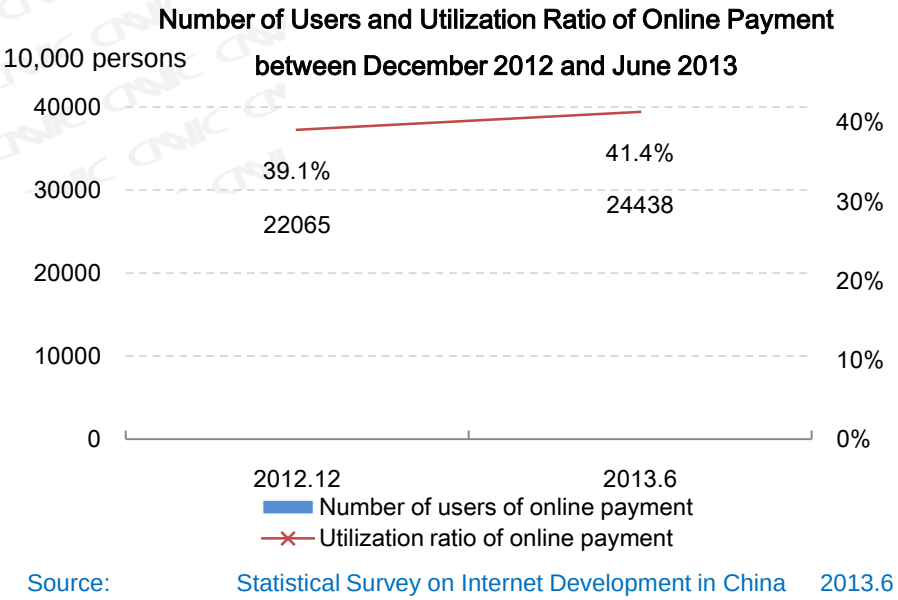
The Chinese online payment market grew rapidly during the first half of 2013 due to the following reasons:

First of all, policy guidance. By the beginning of 2013, the People's Bank of China had issued 233 payment licenses in 6 batches, and introduced a series of policies including "Management Method for Internet-based Payment Business of Payment Institution", positively guiding the development of the online payment sector.

Second, market support. The e-commerce process of traditional companies accelerated, activating the payment-related markets of online shopping, game and online travel booking, etc., as well as the users' ever-increasing demand for other payment channels and facilitating the growth of the size of Internet users of electronic payment and mobile payment.

Third, innovations based on licence, merchant & user resources and business model initiated a new business model of online payment — personal consumer credit. The amount of loan that can be acquired through third-party payment varies from RMB50 to RMB10 million, especially

the micro-credit business that provides personal consumer credit with financing channels and conveient payment, thereby facilitating the development of payment services.



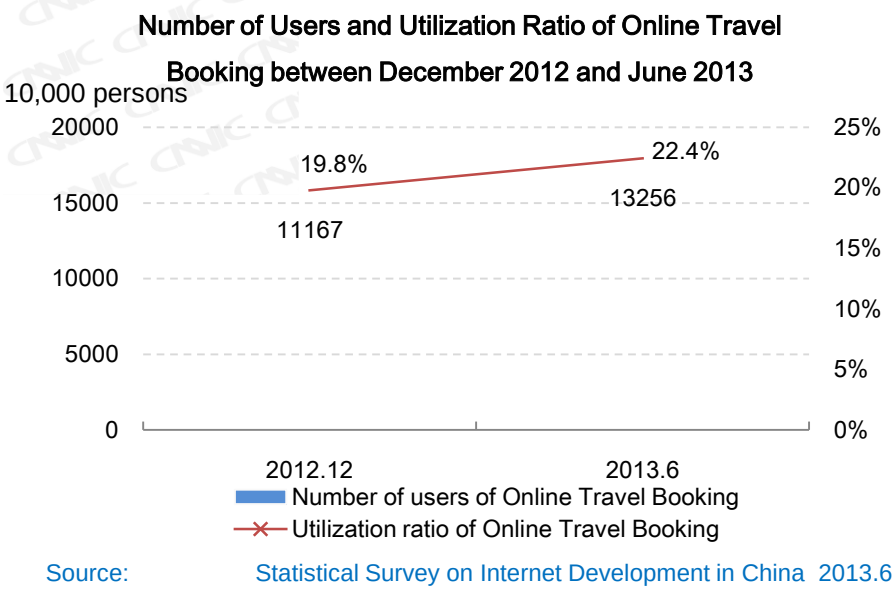
Source: Statistical Survey on Internet Development in China 2013.6

Figure 22. Number of Users and Utilization Ratio of Online Payment in China between December 2012 and June 2013

4. Travel Booking[10]

The number of Internet users that had booked air tickets, hotel rooms, train tickets and travel itinerary on the Internet had reached 133 million by the end of June 2013, accounting for 22.4% of the total Internet users. The proportion of Chinese Internet users who had booked train tickets, air tickets, hotel rooms and travel itinerary online were 2.8%, 9.1%, 7.6% and 5.3% respectively, remaining roughly the same as that at the end of 2012.

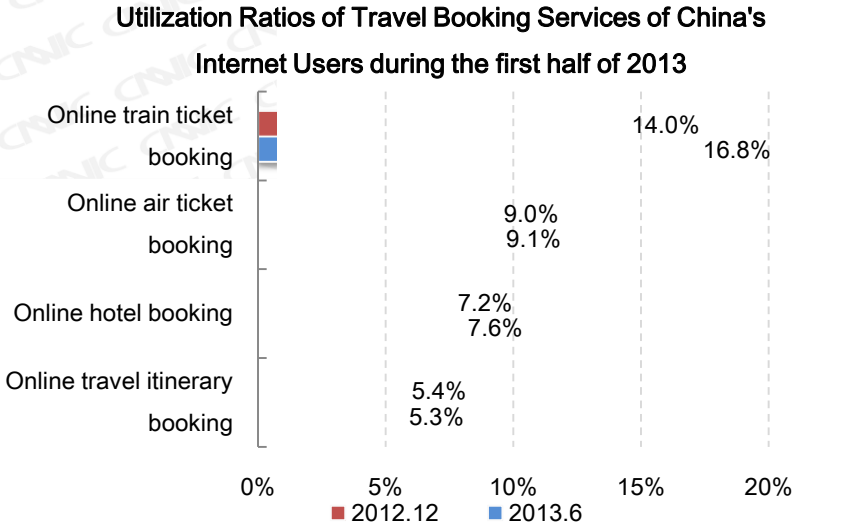
[10] In this report, travel booking is defined as booking air tickets, hotel rooms, train tickets and travel itinerary online in the recent 6 months.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 23. Number of Users and Utilization Ratio of Online Travel Booking in China between December 2012 and June 2013

Thanks to the distinct advantages of online booking, online booking of train tickets grew rapidly and its utilization ratio increased by 2.8% over that at the end of 2012. Compared with other business applications, China's online booking markets of air tickets, hotel rooms and travel itinerary remain in a rapid-growing period and there is a great possibility for growth of Internet users. Along with the increase of the residents' consumption level and the desires for travel as well as significant price reduction of traval-related products, the utilization ratio of various travel-related booking services will increase significantly, and the online travel booking market enjoys a promising prospect.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 24. Utilization Ratios of Travel Booking Services of China's Internet Users during

the First Half of 2013

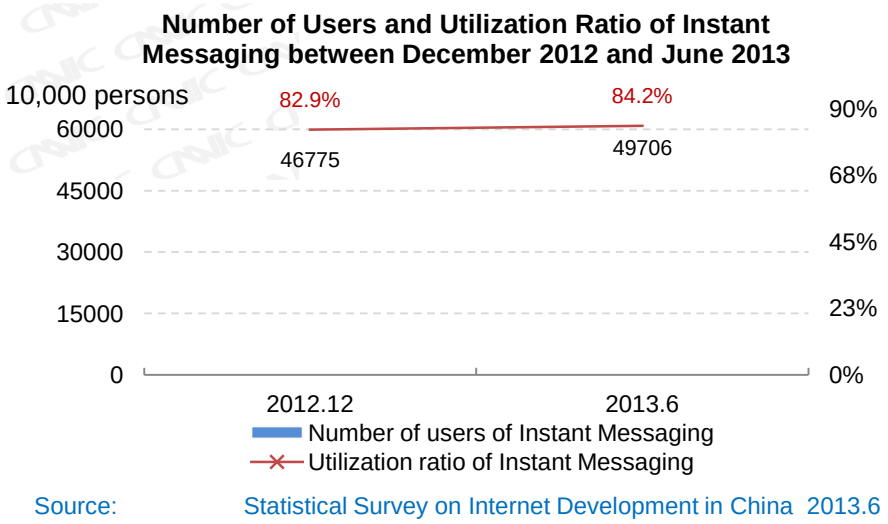
In 2013, mobile Internet applications have penetrated into the online travel booking market, and major vertical travelling websites and App service providers started making inroads into this potential market. The potentials of the travel booking market are shown in the following aspects: First of all, various travel booking applications based on mobile terminal consolidates various Internet information for inquiry, comparison and booking anytime and anywhere. Second, travel booking applications based on mobile terminal will exist in the whole travelling itinerary. It includes pre-booking information inquiry and comparison, in-booking online payment, in-travel picture information sharing and post-travel notes sharing, etc. Third, LBS function can meet the immediante demands. For example, the user searches for hotels, gourmets and recreational places near a certain place. In the future, the seamless joint beween mobile Internet and online travel is expected to greatly stimulate the demand of consumers and promote the development of the online travel booking market.

(III) Communication

1. Instant Messaging

The number of instant messaging users in China had reached 497 million by the end of June 2013, representing a growth of 29.31 million, or 6.3%, compared with the end of 2012. The utilization ratio of instant messaging was 84.2%, up by 1.3% over the end of 2012.

As is seen from the utilization ratio, from the end of 2011 till now, instant messaging has taking the No.1 place amongst all Internet-based applications, and the utilization ratio has been keeping rising. The fast growth is largely attributable to the following 2 points: first of all, chatting is the fundamental function of instant messaging product, it can satisfy the most fundamental demands for communications of humankind and information transfer between users. Therefore, compared with other Internet applications, instant messaging is more popular and thus having an enormous user base. Second, as instant messaging product functions evolve, they not only play the role of communication, but also shift from a chatting tool to a comprehensive platform. On the platform, besides the fundamental chatting function, the introduction of shopping, payment and gaming services, etc. build a good ecosystem for instant messaging products. Constant innovaton of instant messaging functions not only enhanced user experience and attracted new users, but also increased its attraction.



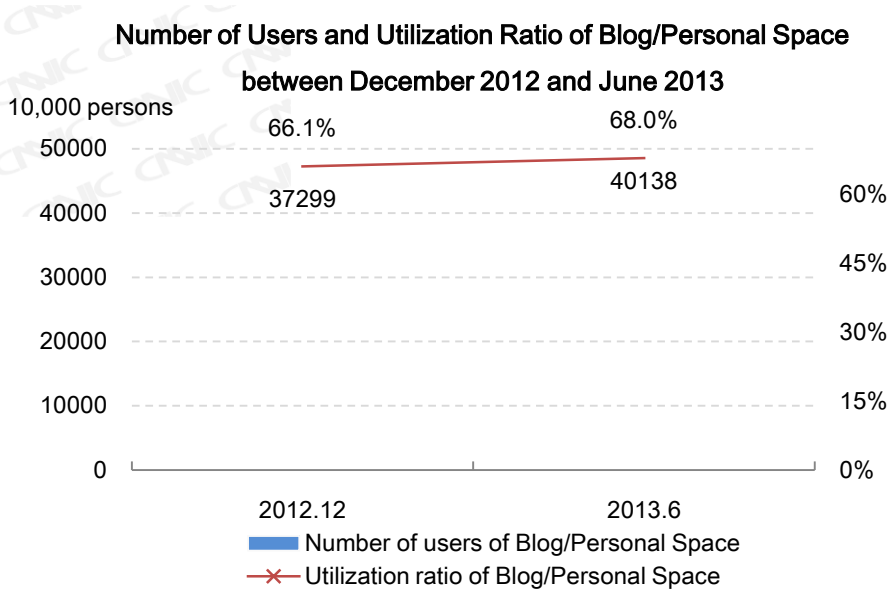
Source: Statistical Survey on Internet Development in China 2013.6

Figure 25. Number of Users and Utilization Ratio of Instant Messaging in China between December 2012 and June 2013

2. Blog/Personal Space

The number of users of blog and personal space had reached 401 million by the end of June 2013, representing an increase of 28.39 million compared with that at the end of 2012. And 68.0% of the Internet users used blog and personal space, up by 1.9% compared with that at the end of 2012.

In recent years, blog activers were transformed from grassroots to elite, while blog content shifted from polularization to specialization. Such blog requires higher cost and more extensive professional knowledge, resulting in decline of ordinary Internet users' enthusiam in releasing blog and turning to microblog and SNS, through which Internet users take their fragmented time to communicate with each other and introduce themselves, therefore, the number of blog Internet users experienced a weak growth in recent year. By the end of June 2013, only about 100 million Internet users were still using blogs, accounting for 17.8% of the total Internet users in China. Some personal space websites have changed themselves into SNS to satisfy the user demand for social intercourse, and therefore, the number of users has been growing.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 26 Number of Users and Utilization Ratio of Blog/Personal Space in China between December 2012 and June 2013

3. Microblog

By the end of June 2013, the number of microblog users had reached 331 million, representing a growth of 22.16 million, or 7.2%, over the end of 2012. The utilization ratio of Internet users that using microblog reached 56.0%, up by 1.3% compared with that of the end the previous year.

After the explosive growth during the period between 2010 and 2011, China's microblog activers entered a relatively steady growth period since 2012. At present, microblog has become one of the most important approaches of Internet users for information acquisitoin, evolving from the social intercourse for maintaining a weak relationship between people to a popular platform of public opinions, as a result, more and more organizations and public figures release or spread information via microblog. Microblog integrates entertainment, leisure, social intercouse and marketing, satisfying the demand for online communications featuring weak relationship and low strength in fragmented time and attracting large quantities of active Internet users. However, at present, various network applications mushroom, attracting some users of microblogs.

Since the beginning of 2013, microblog platform connected with some Internet resources and platforms, and microblog will play a greater role. Microblog is an important portal of mobile applications, and cooperation with other sectors is one of the most important methods for microblog to expand its influence and make profits.

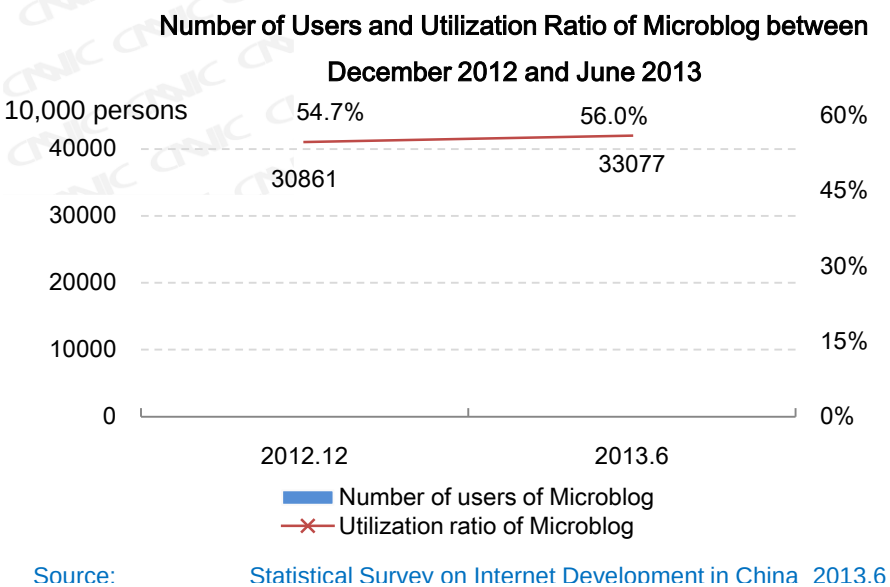


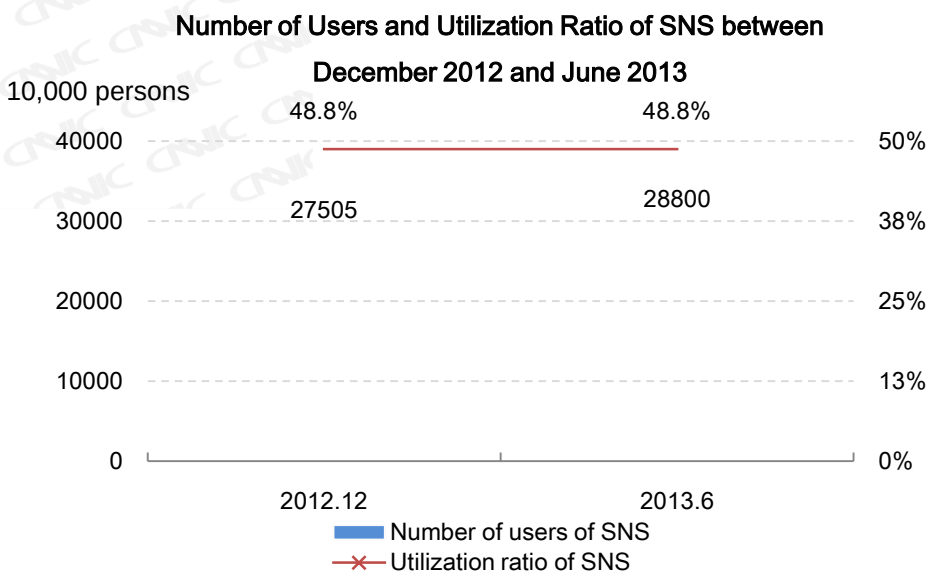
Figure 27. Number of Users and Utilization Ratio of Microblog in China between December 2012 and June 2013

4. Social networking websites

The number of users of social networking websites had reached 288 million by the end of June 2013, up by 12.95 million, or 4.7%, over the end of the previous year. The proportion of users of SNS in the Internet users was 48.8%, remaining basically the same as that at the end of 2012.

SNS has established a well-connected network for Internet users to introduce themselves and communicate with their colleagues and classmates, however, as other communication applications with the model of weak-relationship social intercourse emerged, some users that logged in SNS frequently have gradually turned to other applications. In addition to industry competitors, at present, the pressures that SNS faces, in most cases, come from substitute applications including microblog and new-type instant messaging tool, etc.

In order to meet new challenges, SNS constantly optimizes the content, cooperate with the websites of other types, expand the scope of sharing and forwarding, so as to create a win-win situation. However, the social intercourse type will become more diversified in the future, which means that it is very hard for the invariable and dull social intercourse to meet individual demand. How to maintain the attraction in the process of change will be an important issue for SNS in the future.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 28. Number of Users and Utilization Ratio of SNS in China between December 2012 and June 2013

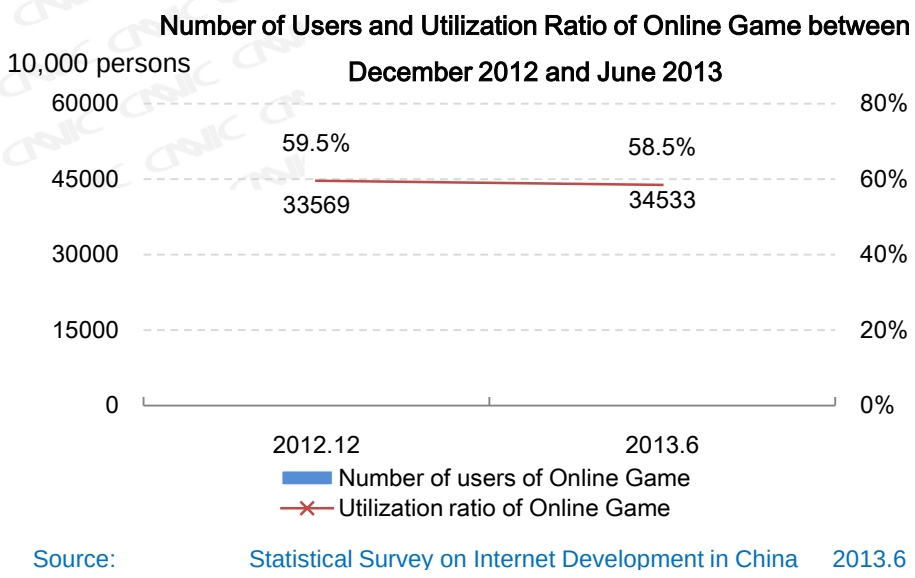
(IV) Online Entertainment

1. Online Games

The number of users of online games had reached 345 million by the end of June 2013, representing a growth of 9.64 million, or merely 2.9%, over the end of the 2012. The utilization ratio of Internet users of online game dropped from 59.5% at the end of the previous year to 58.5%.

China's game industry is gradually changing. First of all, in terms of user scale, as the game industry develops, the growth of its user scale will slow down gradually. Second, in terms of game products, the industry is evolving from heavy games to light games. MMORPG game users that require a lot of time and large quantities of money are dwindling, while ACG and other mobile phone games with lower grade still maintain a growth momentum. Third, the game industry shows a clear multi-terminal tendency. As mobile Internet develops, game devices were also enriched; in addition to PC, tablet PC, intelligent mobile phone even TV and so on may also be used as game terminal; furthermore, new playing methods and experiences have been provided, posing a threat to traditional online games.

In a word, as the game industry matures, the dominant position of MMOG game will be changed gradually. As a key part of the animation industry, China's game market is expected to develop in a healthier way, that is, coordinated development of online game and stand-alone game as well as integrated development of games based on PC and other terminal devices.



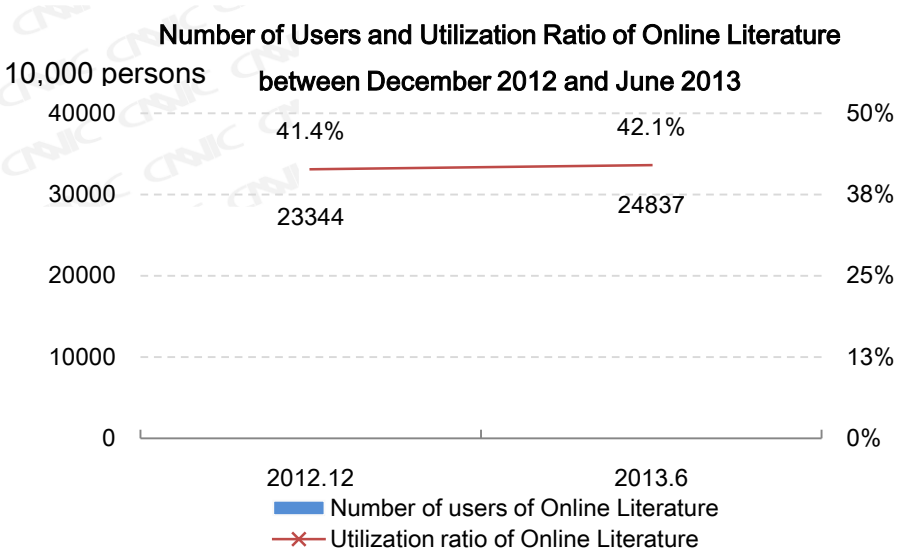
Source: Statistical Survey on Internet Development in China 2013.6

Figure 29. Number of Users and Utilization Ratio of Online Game in China between December 2012 and June 2013

2. Online Literature

The number of online literature users in China had reached 248 million by the end of June 2013, representing an growth of 14.93 million, or 6.4%, over the end of 2012. The utilization ratio of online literature was 42.1%, up by 0.7% over the end of the previous year.

So far, online literature has become a vital force in the literature market, and its appearance not only changed the way of writing and the way of communication of literary works, but also influenced traditional view of people on literature. As is seen from the overall structure of online literature, as well-known Internet companies and entrepreneurs compete with each other to snatch market share of online literature, the competition related to online literature will intensify. As is seen from the content of online literature, online literature is more easily understood compared with traditional literature. Moreover, online literature is more closely related to entertainment, and thus is particularly popular amongst young people. However, due to excessive catering of online literature to the market, online literature showed a tendency of excessive entertainment and excessive commercialization and blindly played to the gallery and neglected the content.

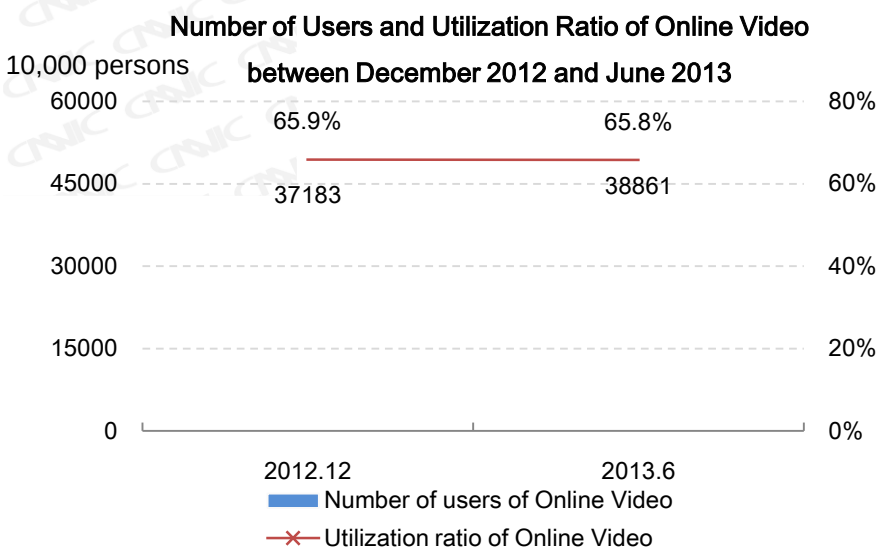


Source: Statistical Survey on Internet Development in China 2013.6

Figure 30 Number of Users and Utilization Ratio of Online Literature in China between December 2012 and June 2013

3. Online Video

The number of video users had reached 389 million by the end of June 2013, representing a growth of 16.78 million, or 4.5%, over the end of the previous year. 65.8% of the Internet users watched online videos, remaining basically the same as that at the end of the previous year.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 31. Number of Users and Utilization Ratio of Online Video in China between December 2012 and June 2013

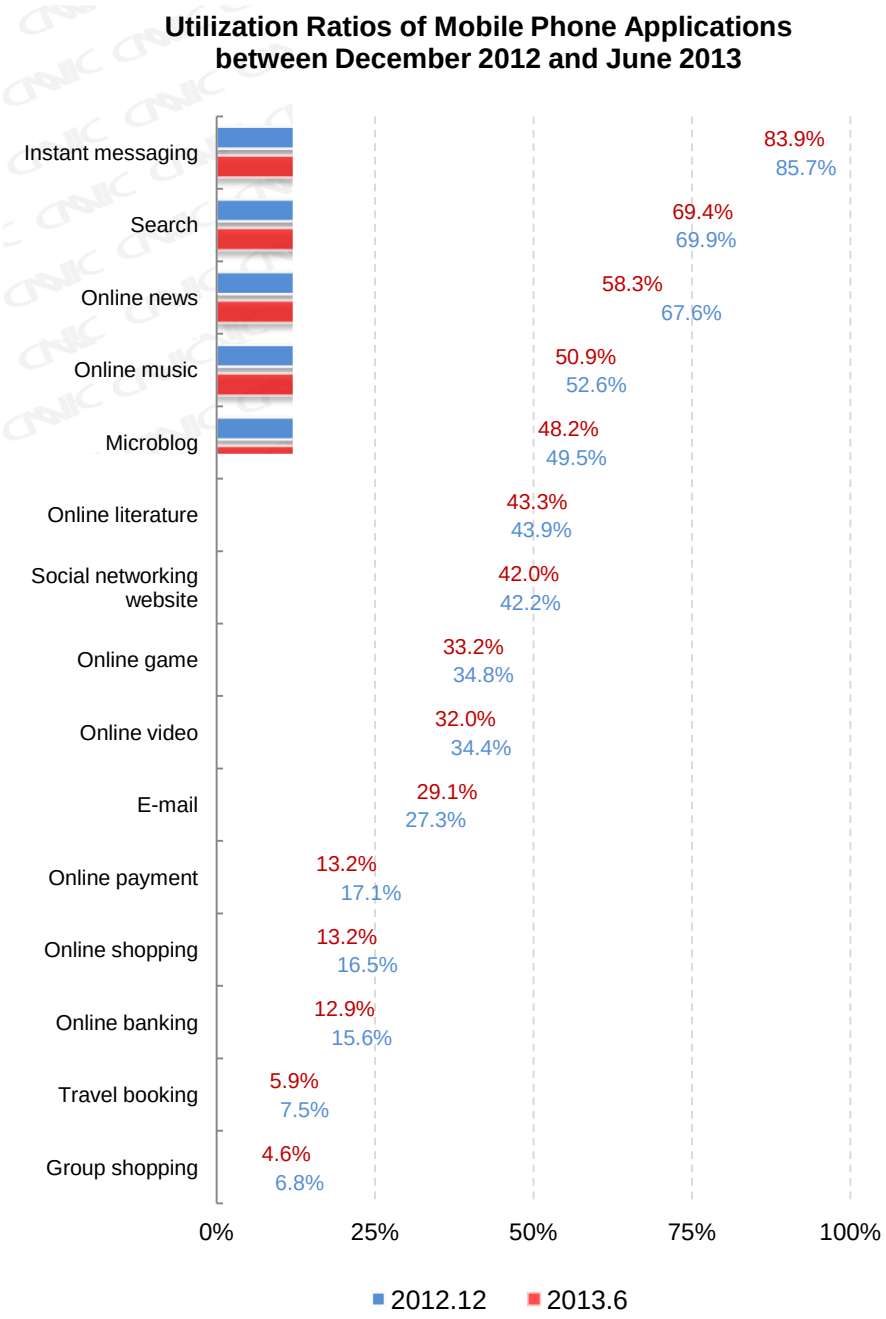
In recent half a year, popular TV series and variety shows mushroomed, driving the development of online video on demand. Video websites, as always, attracted users by means of buying popular TV shows, some websites put particular emphasis on purchase of popular TV

series and gradually created their own unique features so as to attract specific user groups; some websites focus on American TV series or revolution-related TV series, while some websites focus on blockbusters. Meanwhile, in order to reduce the cost pressure caused by outsourcing of popular TV series, all websites made heavier investment in self-made programs, quite a few websites succeeded to a certain extent and their self-made TV series won relatively high on-demand rate. In addition, some websites attracted users through live broadcast of sports events or large-scale activities and made some achievements.

At the level of corporate strategy, M&A activities of the video industry entered the in-depth phase with accelerated reshuffle and intensified competitions. Some video websites acquired other video websites by relying on the strong financial support of their big-name parent companies and expanded their user bases through making an alliance with other Internet giants, so as to realize resources sharing and reduce the purchase cost of popular TV series. In order to expand the market share, some websites provided video resources in conjunction with SNS and microblog, etc., so as to realize resources sharing and try to create a win-win situation in expansion of user coverage. In order to enhance competitiveness, video websites vied with each other to make inroads into the hardware market, launched STB or smart TV, and made profits through selling hardware products or content at the same time of controlling the portals for video playing.

II. Application of Mobile Phone Internet Users

During the first half of 2013, China's mobile Internet developed well with its users of various applications kept growing. The applications relating to communications and information acquisition developed faster and were still the mainstream applications based on mobile phone, especially, users of mobile search and mobile chatting tool grew the most. The penetration rates of the applications relating to entertainment and e-commerce were comparatively low, but the utilization ratio of the whole sector was rising, especailly, the utilization ratios of mobile online video and mobile online payment rose significantly, and became highlights of the industry.



Source: Statistical Survey on Internet Development in China 2013.6

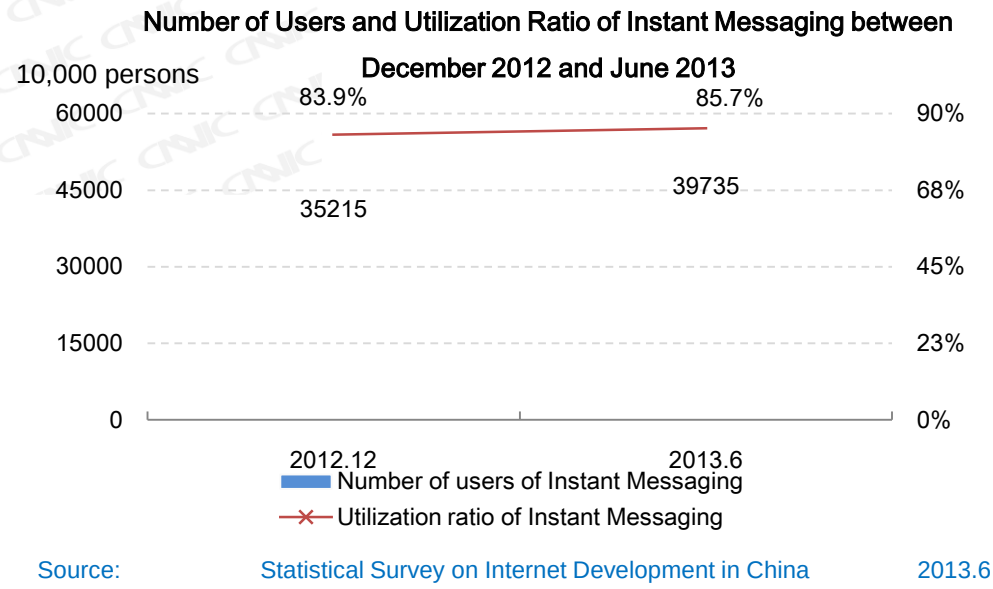
Figure 32. Application of Mobile Phone Internet Users between December 2012 and June 2013

◇ **Mobile instant messaging become a comprehensive platform with great business value**

The number of users of mobile instant messaging had reached 397 million by the end of June 2013, representing a growth of 45.20 million, or 12.8%, over the end of 2012. The utilization ratio of mobile instant messaging was 85.7%, up by 1.8% over the end of 2012. Both the growth rate of users of mobile instant messaging and the utilization ratio of mobile instant messaging exceeded the overall level of instant messaging.

Now, mobile instant messaging product is not only pure chatting tool, but also a comprehensive platform of mobile phone, integrating various Internet services such as

communications, information acquisition, business transactions and online entertainment, etc. For a company, on the platform of mobile instant messaging, its products may be promoted and marketed rapidly and extensively through social intercourse. Mobile instant messaging products integrate communication, information acquisition, social intercourse, game, e-commerce and payment and form a closed-loop ecology, within which all services can be accomplished, thus having enormous and potential commercial value.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 33. Number of Users and Utilization Ratio of Instant Messaging between December 2012 and June 2013

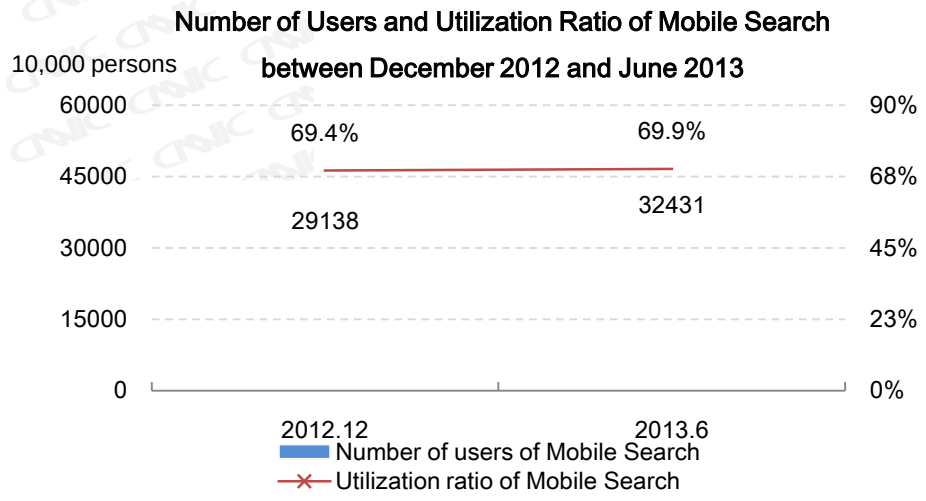
◇ **The mobile search developed rapidly and had enhanced significance as a portal**

The number of users and utilization ratio of mobile search in China had reached 324 million and 69.9% respectively, representing a growth of 11.3% and 0.5% respectively over the end of 2012.

Currently, thanks to the continuous enhancement of performance of smart mobile phone, further reduction of price plus reduction of expenses on mobile Internet access, the proportion of users that use mobile phone to access the Internet increase grdually; mobile search has became the second largest mobile phone application next only to instant messaging, taking an important position in the daily life of Internet users. On the one hand, mobile search represents the extension of computer search, on the other hand, it satisfies the users' demand for conveiently finding information anywhere and anytime. Thanks to the characteristics of high mobility, the mobile search type became more diversified, including not only traditional comprehensive search and vertical search, but also the search functions of various applications. Meanwhile, mobile search input was also diversified, including not only inputs of text and pictures, but also voice, photograph and scanning, etc.

On mobile phone, Internet users may not only search by entering the URL via the browser,

but also enter the search engine and conduct search activities through search App, default search engine of browser, recommended search engine at homepage of browser, built-in search engine as well as the input method and instant messaging, etc. Due to the rapid development of mobile search, search companies attached greater importance to R&D and promotion of mobile search technologies and emphasized various mobile search portals, so as to take a place in the field of mobile search.

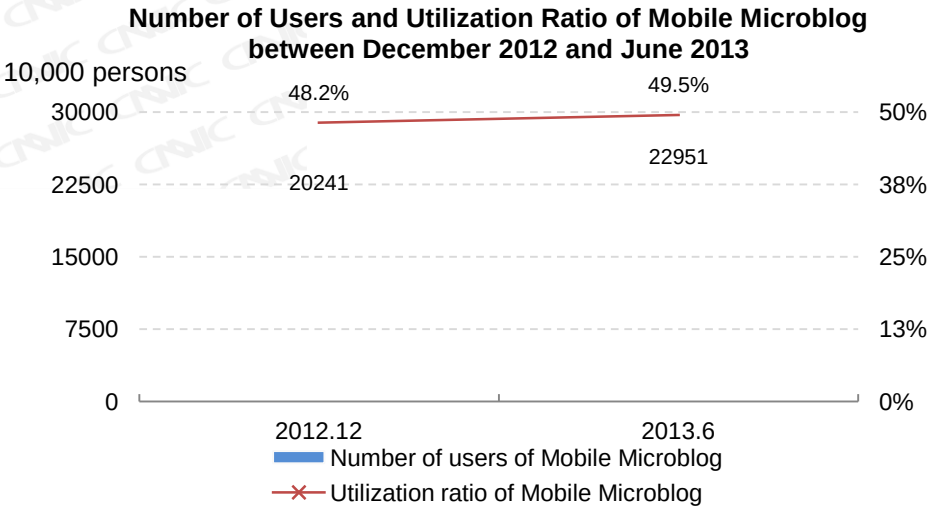


Source: Statistical Survey on Internet Development in China 2013.6

Figure 34. Number of Users and Utilization Ratio of Mobile Search in China between December 2012 and June 2013

◇ **Mobile microblog developed rapidly and became a mainstream application**

The number of Internet users who used microblog on mobile phone had reached 230 million by the end of June 2013, up by 27.10 million, or 13.4%, over the end of 2012. The utilization ratio of mobile microblog was 49.5%, up 1.3% over the end of 2012.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 35 Number of Users and Utilization Ratio of Mobile Microblog between December 2012 and June 2013

◇ **Mobile video became a new growth point of online video**

The number of China's Internet users who watched videos online or downloaded videos on mobile phone had reached 160 million by the end of June 2013, up by 25.36 million over the end of 2012. And the utilization ratio of mobile video amongst mobile Internet users was 34.4%, up by 2.4% over the end of 2012.

The number of mobile video users increased due to the following reasons: First of all, as the size of 3G mobile phone users and the proportion of family WiFi Internet access increase, the limitation of Internet traffic on mobile phone has been initially solved; Second, the performance enhancement of mobile phone hardware created a favorable condition for playing of mobile video and smart mobile phones with dual-core or four-core processors were sold well, both of the size and resolution of mobile phone screen have been increased remarkably; Third, mobile video terminal improved constantly and brought better experience to users, attracting some video users to shift from PC to mobile terminal; Finally, video sharing amongst SNS and mobile phone microblog users also drove the growth of mobile video users.

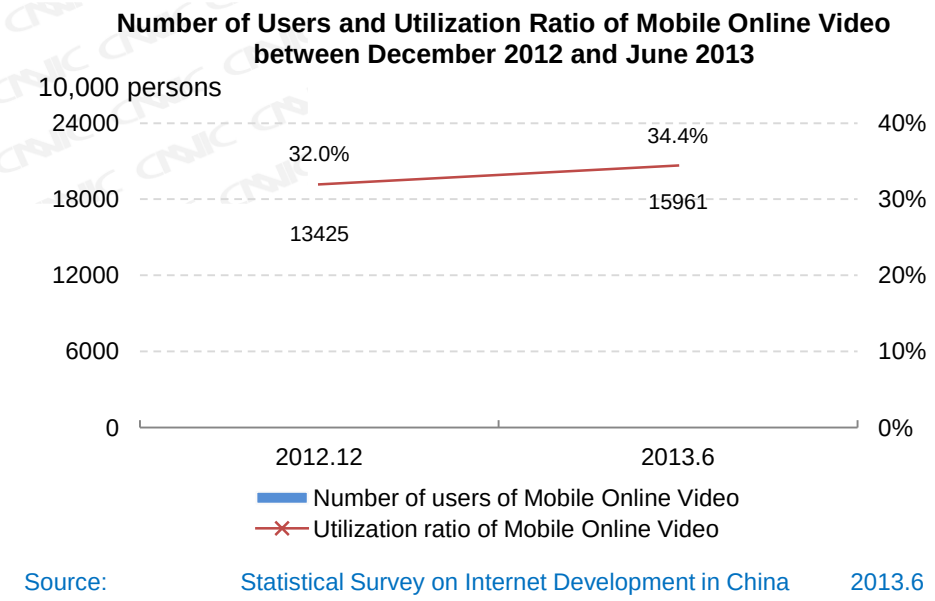


Figure 36 Number of Users and Utilization Ratio of Mobile Online Video between December 2012 and June 2013.

◇ **The mobile online game developed rapidly and became an important way of recreation.**

The number of mobile online game users in China had reached 161 million by the end of June 2013, representing a growth of 21.87 million, or 15.7%, over the end of 2012. The utilization ratio of mobile online games was 34.8%, up 1.6% over the end of 2012.

The mobile online game market still faced many problems despite its continuous growth.

First of all, affected by terminal devices, the user experience of mobile online game is not as good as that of client-side game. Second, the characteristics of fragmentation resulted in deficient sociability of mobile online games, and game users tend to be restricted by superficial social intercourse, and can not carry out in-depth social intercourse. Thirdly, the low threshold of development of mobile online game gave rise to sharp increase of mobile online games, but resulted in serious homogeneious content, which made the mobile online game less attractive to the users and greatly reduced the lifecycle of mobile online game.

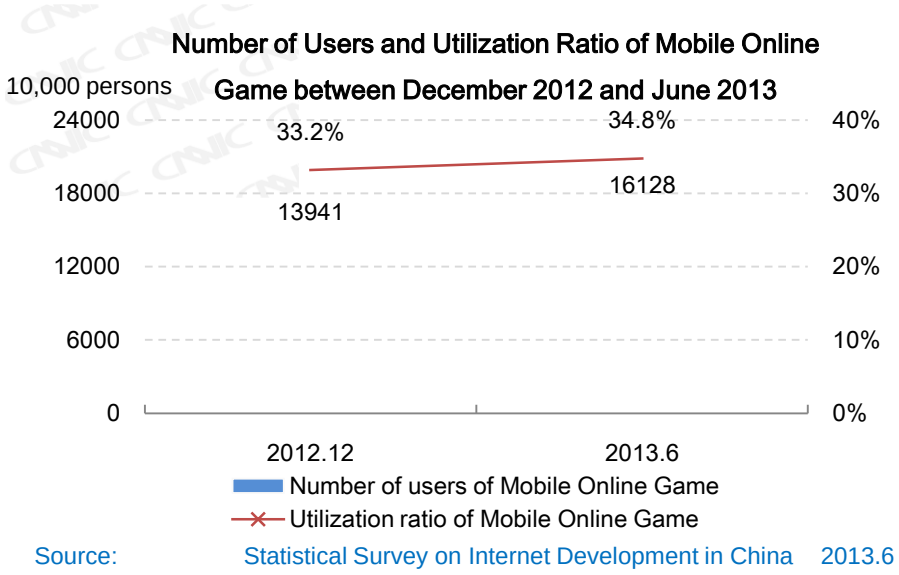
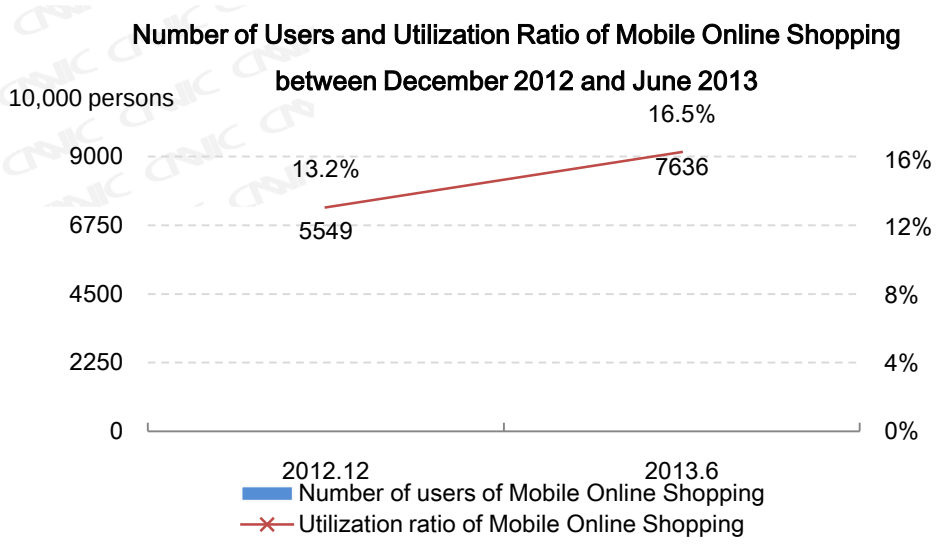


Figure 37 Number of Users and Utilization Ratio of Mobile Online Game between December 2012 and June 2013

◇ **The growth rate of mobile online payment ranked 1st and that of mobile phone online shopping took the second place**

During the first half of 2013, the mobile online payment market grew rapidly, and the growth rate of its users increased the most amongst the applications of business transactions. Meanwhile, the improvement of user experience in mobile online payment promoted mobile phone online shopping market indirectly.

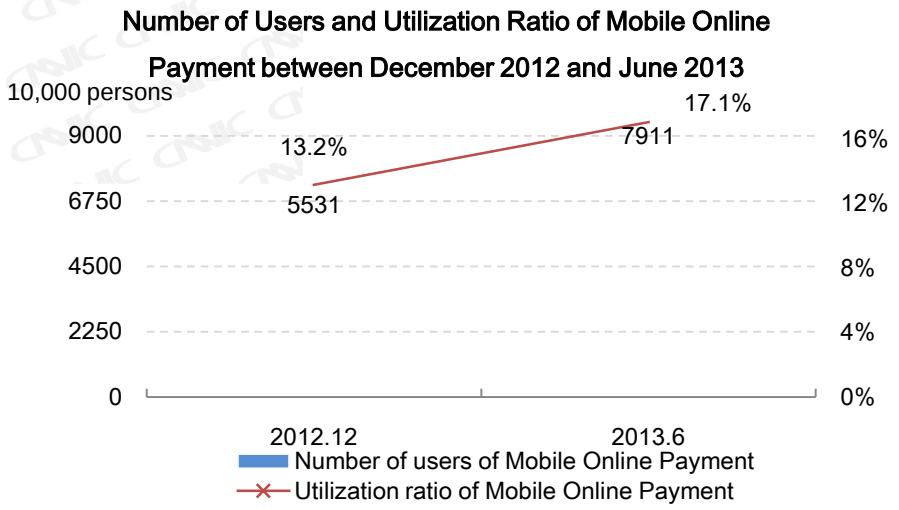
By the end of June 2013, the number of mobile online payment users had reached 79.11 million and the utilization ratio rose to 17.1%, up by 3.9% over the end of December 2012; the size of Internet users who shop on mobile phone reached 76.36 million and the utilization ratio was 16.5%, up by 3.3% over the end of December 2012.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 38 Number of Users and Utilization Ratio of Mobile Online Shopping in China between December 2012 and June 2013

First, mobile shopping removed the limitations of time and space and made it possible to carry out online shopping and online payment anywhere and anytime by making use of fragmented time, which was an important reason why consumers like it. Second, thanks to enlarged mobile phone screen and optimized webpage design, mobile shopping won increasingly enhanced user experience and its acceptance and recognition were on the rise. Third, development of mobile App such as QR code, bar code and search by price comparison and so on as well as improvement of mobile online payment greatly shortened the time and progress of mobile shopping, thereby attracting more users and creating a new growth point for mobile shopping .



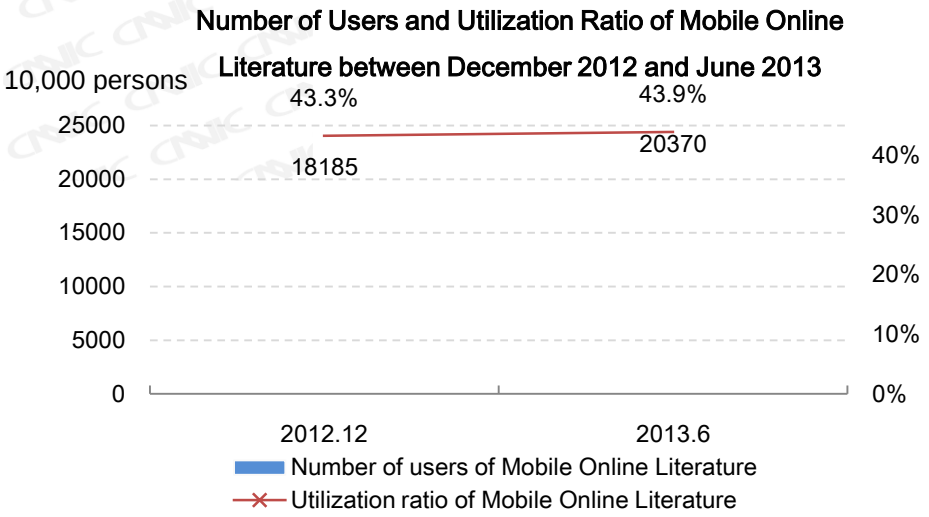
Source: Statistical Survey on Internet Development in China 2013.6

Figure 39 Number of Users and Utilization Ratio of Mobile Online Payment in China between

December 2012 and June 2013

◇ **The utilization ratio of mobile online literature rose to satisfy the demand for fragmented reading**

The number of mobile online literature users in China had reached 204 million by the end of June 2013, up by 21.85 million, or 12.0%, over the end of 2012. The utilization ratio of mobile online literature was 43.9%, up by 0.6% over the end of 2012.



Source: Statistical Survey on Internet Development in China 2013.6

Figure 40 Number of Users and Utilization Ratio of Mobile Online Literature between December 2012 and June 2013

Mobile phone device is more portable and convenient for online literature reading anytime and anywhere, not only satisfying the demand of users for fragmented reading, but also greatly accelerating the communication speed of online literature. The introduction of mobile phone client diversified the reading mode of users. The mobile online literature market enjoys a promising development prospect, and renowned Internet companies and entrepreneurs vied with each other to make deployments in online literature based on mobile phone terminal.

Appendix 1 Attached Tables of Basic Internet Resources

Table 1. Number of IPv4 Addresses in the Regions of China

Region	Number of Addresses	Equivalence
Mainland China	330,617,088	19A+179B+144C
Taiwan	35,403,520	2A+28B+19C
Hong Kong SAR	11,814,400	4B+245C
Macau SAR	324,864	4B+245C

Table 2 Allocation of IPv4 addresses among the organizations in Mainland China

Organization name	Number of Addresses	Total number of IPv4 addresses
China Telecom	125761280	7A+126B+247C
China United Network Communications Corporation	69816576	4A+40B+81C
China Mobile Communications Corporation	51088384	3A+11B+132C
China Education and Research Network	16649728	254B+14C
China Tietong Telecommunications Co., Ltd.	15795200	241B+4C
State Information Center	4194304	64B
CNISP Technology (Beijing) Co., Ltd.	3606528	4B+245C
Beijing Guoxin Bilin Communication Technology Co., Ltd.	2115584	32B+196C
Beijing Education Information Network Service Center Co., Ltd	2097152	32B
Oriental Cable Network Co., Ltd.	1785856	4B+245C
Beijing Teletron Telecom Engineering Co., Ltd	1544448	4B+245C
KNET	1190144	4B+245C
China Cable Television Network Co., Ltd	1188864	4B+245C
CECT-CHINACOMM Communications Co., Ltd	1011712	4B+245C
Beijing Gehua CATV Network Co., Ltd	999424	4B+245C
HiChina Zhicheng Technology Ltd.	999424	4B+245C
China Science and Technology Network	928768	4B+245C
Beijing Chengyi Times Network Engineering Technology Co., Ltd	901120	4B+245C

Beijing Bitone United Networks Technology Service Co., Ltd	786432	12B
21 Viatnet Group, Inc.	773120	4B+245C
Shenzhen Topway Video Communication Co., Ltd	722944	4B+245C
Beijing Shidai Hongyuan Communication Technology Co., Ltd	720896	11B
Beijing Weishi Chuangjie Technology Development Co., Ltd	655360	10B
Beijing Founder Broadband Network Service Co., Ltd.	647168	4B+245C
Beijing New-billion Telecom Technology Co., Ltd	589824	9B
Huashu Netcom Information Port Co., Ltd.	524288	8B
CITIC Networks	524288	8B
Beijing Kuandaitong Telecom Technology Co., Ltd	524288	8B
Jiangsu Cable TV Data Network Co., Ltd.	524288	8B
Shaanxi Broadcast & TV Network Media (Group) Co., Ltd.	503808	4B+245C
Bejing Hsoft Technologies Inc.	482304	4B+245C
Guangdong Jinwanbang Technology Investment Co., Ltd	479232	4B+245C
Jinan UPNET Technology Co., Ltd.	459776	241B+4C
Huabei Oil Communication Corporation Information Center	458752	7B
Daqing Zhongji Petroleum Telecommunication Construction Co., Ltd	438272	4B+245C
FibrLINK Communications Co., Ltd	407552	4B+245C
Beijing SRIT NETech Co., Ltd	385024	4B+245C
Alibaba Cloud Computing Co., Ltd	344064	4B+245C
Jiangxi Radio and TV Network Transmission Co., Ltd	327680	5B
Guangzhou Zhujiang Digital Group Co., Ltd	327680	5B
Jinan Broadcasting Jiahe Broadband Network Co., Ltd	270336	4B+245C
Beijing Gengkuai Internet Technology Co., Ltd.	263168	4B+245C
Chongqing CATV Network Co., Ltd	262144	4B
Guangdong CATV Network Co., Ltd	262144	4B
Beijing Kuancom Network Technology Co., Ltd	262144	4B
ChinaCache International Holdings Ltd	262144	4B

Fujian Fiber Intercommunications Co., Ltd	262144	4B
Shenzhen Zhongtian Network Technology Co., Ltd	262144	4B
263 Network Communication Co., Ltd.	259072	4B+245C
Shanghai Yovole Computing Networks Co., Ltd	197632	241B+4C
Shenzhen Tencent Computer System Co., Ltd	196608	3B
Beijing Sinnet Technology Co., Ltd	189440	4B+245C
Gold-bridge Netcom Telecommunication Co., Ltd	188416	4B+245C
Pacnet Business Solutions (Shenzhen) Limited	164864	4B+245C
Guangdong Efly Network Co., Ltd	147456	4B+245C
Tianjin Broadcast and TV Network Co., Ltd	144384	4B+245C
Qihoo 360 Technology Ltd.	133120	4B+245C
Beijing Shitong Taida Communication Technology Co., Ltd.	132096	241B+4C
Beijing Junyuan Hezhong Technological Development Co., Ltd.	132096	241B+4C
China Motion Telecom	131072	2B
SVA Information Industry Co., Ltd	131072	2B
Shenzhen Wotone Network Development Co., Ltd	131072	2B
Sichuan Ping An Communication Technology Co., Ltd.	131072	2B
Beijing Hangshu Wide-net Technology Co., Ltd	131072	2B
Henan Xinfei Jinxin Computer Co., Ltd	131072	2B
Shanghai Yixuan Network Technology Co., Ltd	131072	2B
Guangzhou Yizhan Hulian Computer Technology Ltd.	131072	2B
Beijing Xunda Zhilian Technology Co., Ltd.	131072	2B
Sub-total	318452736	2A+28B+19C
Others	12164352	4B+245C
Total	330617088	19A+179B+144C

Data source: APNIC and CNNIC

Note 1: As a national Internet registry (NIR) certified by APNIC and approved by Ministry of Industry and Information Technology, CNNIC organized ISPs with certain scale and influence to build up an IP address allocation alliance. At present, CNNIC Allocation Alliance totally has 387 members, holding 74135552 IPv4 addresses, about 4.42A. Most of the above-listed are members of CNNIC Allocation Alliance;

Note 2: Only the organizations with the number of IPv4 addresses greater than 2B are listed in the IPv4 address allocation table.

Note 3: The deadline for the above statistical data is 30.06.13.

Table 3 Number of IPv6 addresses in China

Region	Number of Addresses
Mainland China	14607 /32s
Taiwan	2344 /32s
Hong Kong SAR	119 /32s
Macau SAR	3 /32s

Table 4 IPv6 address allocation in Mainland China

Organization name	Number of IPv6 addresses (/32)
China Telecom	4099
China Mobile Communications Corporation	4098
China United Network Communications Corporation	4098
CNNIC IP Address Allocation Alliance	2272
China Education and Research Network	16
Beijing Internet Institute Information Technology Co., Ltd	16
Others	8
Total	14607

Data source: APNIC and CNNIC

Note 1: /32 as shown in the IPv6 address allocation table is a method for presentation of IPv6 address, and the corresponding number of addresses is $2^{(128-32)} = 2^{96}$.

Note 2: The deadline for the above statistical data is 30.06.13.

Table 5 Proportion of IPv4 address in each province

Province	Proportion
Beijing	25.61%
Guangdong	9.61%
Zhejiang	5.31%
Shandong	4.93%
Jiangsu	4.81%
Shanghai	4.47%
Liaoning	3.39%
Hebei	2.89%
Sichuan	2.81%
Henan	2.67%

Hubei	2.42%
Hunan	2.41%
Fujian	1.96%
Jiangxi	1.77%
Chongqing	1.71%
Anhui	1.68%
Shaanxi	1.66%
Guangxi	1.40%
Shanxi	1.30%
Heilongjiang	1.23%
Jilin	1.23%
Tianjin	1.05%
Yunnan	0.99%
Inner Mongolia	0.79%
Xinjiang	0.62%
Hainan	0.48%
Gansu	0.48%
Guizhou	0.44%
Ningxia	0.24%
Qinghai	0.18%
Tibet	0.13%
Others	9.33%

Data source: APNIC and CNNIC

Note 1: The above IP address statistics are for the provinces where the IP address owners are located.

Note 2: The deadline for the above statistical data is 30.06.13.

Table 6 Number of domain names, .CN domain names and .中国 domain names by provinces

Province	Domain name		Including: .CN Domain name		.中国 domain names	
	Number	Proportion in total domain names domain names	Number	Proportion in total CN domain names	Number	Proportion in total .中国 domain names
Zhejiang	3552894	24.2%	2765296	35.4%	19041	7.0%
Guangdong	2996860	20.4%	1869984	24.0%	51075	18.7%
Beijing	1539013	10.5%	545288	7.0%	31104	11.4%

Shanghai	752435	5.1%	271816	3.5%	15753	5.8%
Shandong	728145	5.0%	400602	5.1%	16785	6.1%
Fujian	720325	4.9%	325392	4.2%	13911	5.1%
Jiangsu	602741	4.1%	194917	2.5%	22106	8.1%
Henan	366222	2.5%	71481	0.9%	4950	1.8%
Sichuan	355921	2.4%	79485	1.0%	10193	3.7%
Liaoning	222850	1.5%	67261	0.9%	12538	4.6%
Hebei	221139	1.5%	66320	0.8%	7256	2.7%
Hubei	200952	1.4%	64065	0.8%	5435	2.0%
Anhui	194984	1.3%	55088	0.7%	3627	1.3%
Hunan	176868	1.2%	56771	0.7%	4650	1.7%
Hainan	154531	1.1%	15213	0.2%	666	0.2%
Chongqing	138128	0.9%	41788	0.5%	6272	2.3%
Shaanxi	132144	0.9%	36290	0.5%	4043	1.5%
Tianjin	101731	0.7%	31977	0.4%	3102	1.1%
Heilongjiang	93186	0.6%	28806	0.4%	4425	1.6%
Jiangxi	87970	0.6%	29882	0.4%	2449	0.9%
Jilin	85180	0.6%	19708	0.3%	3116	1.1%
Guangxi	81982	0.6%	30609	0.4%	2918	1.1%
Shanxi	79791	0.5%	22730	0.3%	3125	1.1%
Yunnan	72514	0.5%	29330	0.4%	4841	1.8%
Inner Mongolia	45707	0.3%	13850	0.2%	1950	0.7%
Xinjiang	39464	0.3%	14198	0.2%	811	0.3%
Guizhou	38280	0.3%	15135	0.2%	1481	0.5%
Gansu	29024	0.2%	10384	0.1%	634	0.2%
Ningxia	16013	0.1%	4219	0.1%	369	0.1%
Qinghai	11337	0.1%	2264	0.0%	219	0.1%
Tibet	5152	0.0%	1212	0.0%	209	0.1%
Others	847182	5.8%	622895	8.0%	14330	5.2%
Total	14690665	100.0%	7804256	100.0%	273384	100.0%

Note: The total number of domain names by provinces doesn't cover .EDU.CN.

Appendix 2 Organizations Supporting the Survey

We would like to express our heartfelt thanks to the following organizations which have provided strong support for the availability of online questionnaires for this survey and the collection of the basic resources data.

（一）. Portal websites for survey (listed according to the time when the survey links are provided)

Taobao.com	Sohu.com	NetEase.com
Iqiyi.com	b2b.cn	

（二）. Organizations supporting the survey (not listed in any particular order)

China Telecommunications Corporation
China International Electronic Commerce Center
China Education and Research Network Center
China Science and Technology Network Center
China United Network Communications Limited
China Mobile Communications Corporation
SanFront Information Technology Company
Chongqing Zhijia Information Technology Co., Ltd (CQHOT)
Beijing East Netscape Information Technology Co., Ltd
Beijing SinoNets Xinye Network and Telecommunication Co., Ltd
Beijing Innovative Linkage Technology Ltd.
Beijing Xinnet Digital Information Technology Co., Ltd
Guangdong Eranet International Limited
Xiamen Longtop On-line Technology Co., Ltd (its brand Bizcn)
Xiamen Jingtong Technology Industry Co., Ltd.
Xiamen ZZY Network Service Co., Ltd
NET.cn
Zhongqi Power S&T Co., Ltd.

Appendix 3 Introduction to CNIDP

China Internet Data Platform (cnidp.cn) – open and shared Internet statistical data and services

Launched and run by CNNIC

◆ Providing Internet statistical data and services for free

Reflecting the situation of Internet development in China objectively and timely

Website of the platform: www.cnidp.cn

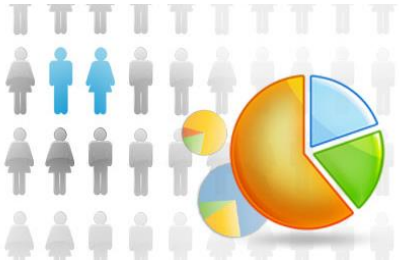
Introduction to the platform

Chinese Internet Data Platform, launched and run by CNNIC, adopts the research method of fixed sample panel to reflect multiple facets (macro and micro) of Internet development situation in China and provide multifaceted decision-making support for the participants of the Internet industry through the Internet using behavior data of Chinese Internet users samples collected by the survey clients continuously in real time and by analyzing those data statistically.

Function Demonstration

Statistical data

Provide weekly, monthly, quarterly and half-year statistical including the covered users, visiting times, page views, vi duration and other indicators for domestic mainst websites/software; the data are updated within no more than 3 c

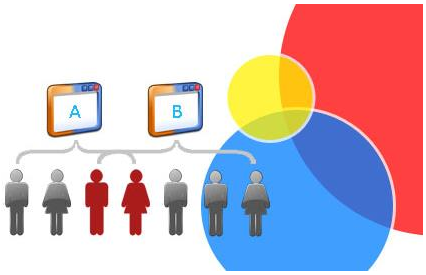


Users' features

Provide multi-dimensional structural distribution data including gender, age, academic degree, occupation, salary, regional and city levels for domestic mainstream websites/software.

Overlap analysis

Conduct statistics on the overlap of user groups and the structural distribution of different user groups for different websites/software.



Trend comparison

Provide detailed historical statistical data of each day so as to reflect the trend of historical changes for domestic mainstream websites/software.